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ABSTRACT

This publication is the second annual report on the programs and plans of the National Center for Education Statistics (NCES). Representatives of state and federal education agencies have presented the NCES with a report, "A Guide to Improving the National Education Data System," which contains recommendations for improving the nation's education statistics system. A congressionally mandated panel has also recommended changes to the educational information reporting system. This document describes the current plans by the NCES to meet the needs that these previous reports have identified, its plans for the future, and its major publications. The descriptions of many ongoing efforts are updated, and information is provided on new data collection efforts, such as the Postsecondary Education Quick Information System and the Beginning Postsecondary Student Longitudinal Survey. General and detailed data on sources, uses, and dissemination of data on education from kindergarten through graduate school are provided. Chapters are as follows: (1) introduction; (2) elementary and secondary education; (3) postsecondary education; (4) educational assessment; (5) national longitudinal studies; (6) vocational education; (7) library statistics program; and (8) major publications of the NCES. Additional information can be obtained from the NCS employees listed at the end of each program description. (SLD)

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of the National Center for Education Statistics

1991 Edition

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Programs and Plans

of the National Center for Education Statistics

1991 Edition

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Secretary

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National Center for Education Statistics

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e–1).

October 1991

Commissioner's Statement

This publication is the second annual report on the programs and plans of the National Center for Education Statistics (NCES). It comes at a particularly critical time in the history of education. About 2 years ago, the President and the nation's governors set six national education goals to be achieved by the year 2000. In response, the Secretary of Education and the President have developed a long-term education strategy, called AMERICA 2000, to restructure and revitalize our education system to reach these goals. In this climate, the demand for education information and data has expanded beyond everyone's expectations.

Earlier in the year, representatives of state and federal education agencies and other interested groups presented NCES with a report, *A Guide to Improving the National Education Data System,* containing 36 recommendations for improving the nation's elementary and secondary education statistics system. A more recent report, *Education Counts: An Indicator System to Monitor the Nation's Educational Health,* was prepared by a Congressionally mandated Special Study Panel on Education Indicators. It recommended improvements in the information currently used to judge the quality of education provided by our schools. It is clear that NCES must respond innovatively and resourcefully to existing demands for data while anticipating future demands for information to support education policy decisionmaking and practice.

This report describes the Center's current programs for meeting these needs, its future plans, and its major publications. In addition to updating the descriptions of many of our ongoing programs, the 1991 edition contains information on new data collection efforts such as the Postsecondary Education Quick Information System and the Beginning Postsecondary Student Longitudinal Survey. The reader can find both general and detailed information on the sources, uses, and dissemination of data on education from kindergarten through graduate school. This includes information on programs that provide vocational, international, and assessment data. There is also a section at the end of each survey description that addresses issues of concern to policymakers and researchers.

Future plans in the program areas are discussed as well. The elementary and secondary program, for example, is proposing a major expansion of the Census Bureau's local government census in September 1992 to collect school district financial information including core instructional expenditures as recommended by the Council of Chief State School Officers. Also in 1992, NAEP will conduct trial state reading and mathematics assessments in the fourth grade for the first time. And, in support of National Education Goal Five (Adult Literacy and Lifelong Learning), the postsecondary program is designing a system to assess critical thinking, problemsolving ability, and communication skills of college students.

This report should answer basic questions about the programs and plans of NCES. Additional information can be obtained from the NCES employees listed at the end of each program description. I invite you to send us comments on how to make future editions more useful.

Emerson J. Elliott
Acting Commissioner of Education Statistics

Acknowledgments

Programs and Plans of the National Center for Education Statistics was prepared by the Policy and Review Branch of the Data Development Division, in the National Center for Education Statistics, Office of Educational Research and Improvement. Jeanne E. Griffith, Associate Commissioner provided general supervision.

John Ralph, Chief of the Policy and Review Branch, oversaw the development of this publication. Paul Mertins initiated the process for updating each of the program descriptions while Dawn Nelson did the final editing and reviewing. Mary Frase was consulted for technical guidance and reviewed the entire report. Paul R. Hall, Acting Associate Commissioner for Postsecondary Education; Paul D. Planchon, Associate Commissioner for Elementary and Secondary Education; and Gary W. Phillips, Acting Associate Commissioner for Educational Assessment, also reviewed the report. Karen Pierri of Pinkerton Computer Consultants, Inc., compiled and edited the new sections and changes to the existing chapters.

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NCES Statistics:

Who Uses Them and How They are Disseminated

NCES and the Office of Educational Research and Improvement (OERI) have developed an information program that provides the users of education statistics with access to a wide range of data. Statistical information is provided through the NCES publications program, the National Data Resource Center, the Education Information Branch, and the Education Resources Division.

In a recent 5-week period, an OERI information specialist kept a record of the requests for statistical information. There were 490 telephone calls, letters, and personal visits during this period. An analysis of the inquiries indicates that 3 percent came from Members of Congress and Congressional committees; 15 percent from government agencies, including federal, state and local governments; 24 percent from educational institutions and organizations; 22 percent, from the news media; 25 percent from business firms and a variety of other private organizations; and 11 percent from the general public, including parents, teachers, students, and concerned citizens.

Education statistics are used for a number of purposes. Congress uses the data produced by the National Center for Education Statistics to plan federal education programs, to apportion federal funds among the states, and to serve the needs of constituents. Federal agencies, such as the Departments of Defense, Labor, and Commerce and the National Science Foundation, are concerned with the supply of trained manpower coming out of schools and colleges, and also with the subjects that are being taught there. State and local officials are concerned with problems of staffing and financing public education. Educational organizations, such as the American Council on Education and the National Education Association, use the data for planning and research. The news media, such as the national television networks, national news magazines, and some of the nation's leading daily newspapers, frequently use NCES statistics to inform the public about such matters as school and college enrollment and expenditures per student. Business organizations use trend data on enrollments and expenditures to forecast the demand for their products. The general public uses education statistics to become more informed citizens and to make intelligent decisions concerning the educational issues of the day.

NCES plans to issue approximately 100 publications this year. These documents include early releases, bulletins, statistical reports, directories, and handbooks of standard terminology. Many of the releases and reports reflect the findings of a specific survey, but at least three of the Center's publications—the *Digest of Education Statistics, Projections of Education Statistics,* and *The Condition of Education*—cover the field of education statistics from a broad perspective. A more detailed description of these publications appears in Chapter 8.

The National Data Resource Center responds to requests for special statistical tabulations and analyses of data files maintained by NCES. The Center is described in more detail in Chapter 2.

The Education Information Branch provides education statistics and research findings in response to approximately 49,000 letters, telephone calls, and personal visits each year. The inquiries range from simple requests for specific bits of information to more detailed questions that frequently require special tabulations, analyses, or reports. The information specialists in the Education Information Branch have a detailed knowledge of NCES data as well as related statistics emanating from the Bureau of the Census, Bureau of Labor Statistics, Bureau of

Economic Analysis, and a variety of other public and private agencies. In addition to providing answers or referrals, Education Information Branch staff members can provide assistance in ordering any of the OERI publications and computer data tapes.

The Education Information Resources Division operates an electronic bulletin board that makes it possible for callers to receive statistical and research information electronically. Through computer tapes, micro-fiche, and on-line computer capacity, the division provides a wealth of information that is not available in published form. Detailed statistics on individual school districts and colleges and universities, for example, are stored on computer tapes. These tapes can be purchased, or special computer tabulations can be generated, upon request on a fee-for-service basis.

For additional information:

Education Information Branch
Capitol Plaza Building, Suite 300
555 New Jersey Avenue, NW
Washington, DC 20208-5641
Telephone number:

from anywhere in United States:	1-800-424-1616
from metropolitan Washington:	(202) 626-9854 or (202) 219-1651

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1

Introduction

The National Center for Education Statistics (NCES) collects statistics on the condition of education in the United States, analyzes and reports the meaning and significance of these statistics, and assists states and local education agencies in improving their statistical systems. NCES supports a wide range of activities. It provides policy-relevant data on issues such as access of minorities to postsecondary education and the impact of enrollment changes on institutions and the outcomes of education. NCES also provides current data on vocational education, and it produces longitudinal data on various cohorts of students from elementary through postsecondary education and into the work force.

The Center's programs are directed toward:

1. Maintaining and analyzing the following major cross-sectional databases: at the elementary-secondary level—the **Common Core of Data**, the **Schools and Staffing Survey**, and the **Private School Survey**; and, at the postsecondary level—the **Integrated Postsecondary Education Data System**, the **National Postsecondary Student Aid Study**, the **Recent College Graduates Study**, the **National Survey of Postsecondary Faculty**, and the **Survey of Earned Doctorates Awarded in the United States**. In addition, a new, wide-ranging study, the **National Household Education Survey**, is being implemented. It will contain information on all levels of education from preschool to postsecondary. These data bases are the principal sources for the Center's most widely used publications—*The Condition of Education, Digest of Education Statistics,* and *Projections of Education Statistics.*

2. Producing and analyzing data from the Center's longitudinal studies: the **National Longitudinal Study of 1972, the High School and Beyond Study,** and the **National Education Longitudinal Study of 1988.** These studies address differences in student achievement, effects of financial aid on access to postsecondary education, youth employment, high school dropouts, discipline and order, and the quality of education in public and private schools. A new longitudinal study, **Beginning Postsecondary Student Longitudinal Study (BPS)**, has been initiated and is the first attempt by NCES to produce longitudinal data beginning with students first entering postsecondary education. Another proposed longitudinal study, **Baccalaureate and Beyond**, is being planned for implementation in 1993. It will follow a cohort of students, who are near graduation, into the work force or further educational endeavors.

3. Coordinating the **National Assessment of Educational Progress** which assesses academic achievement in a number of domains.

4. Administering surveys through the **Fast Response Survey System** and the **Postsecondary Education Quick Information System** which provide data rapidly on current policy issues.

5. Analyzing NCES data on vocational education.

6. Participating in international surveys of educational achievement and programs to develop cross-national education data and indicators.

The format of this publication is straightforward. Each chapter contains a brief introduction; a section on data uses; summaries of the various programs and plans; a list of selected publications, tabulations, and data files; and a data collection calendar for that group of programs. Within most program descriptions are: a brief introduction, a design section in which a blueprint of the program is described, a components section detailing what data are collected, and a final section addressing issues of concern to policymakers and researchers.

2

Elementary and Secondary Education

The focus of the National Center for Education Statistics (NCES) program at the elementary and secondary level is to provide information on the condition of public and private education. The basic program includes national, state, and local data collection systems on public and private elementary and secondary education. Important recent additions to the Center's data collection programs include the Schools and Staffing Survey and the National Household Education Survey. Together with the Common Core of Data, and a number of other surveys, they supply a wealth of information about the condition of elementary and secondary education in the Nation.

An important part of the program is the publication of an annual report titled *Dropout Rates in the United States*. Mandated by law, this publication reports dropout, retention, and graduation rates to the appropriate committees of Congress on the second Tuesday after Labor Day. At the current time, the Current Population Survey (conducted by the Bureau of the Census) is the primary source of data for this report.

Data Uses:

The statistics NCES collects from state education agencies and from other special surveys are used extensively in many ways by persons outside of NCES. They are used for testimony before Congressional committees, for planning in various federal executive departments, and for projects developed by professional organizations. They are also used by state executive and legislative staffs, by state education agencies and local education agencies, and by associations of local school systems. Other users are colleges, universities, and other facilities that do education research; various businesses that sell to educational institutions; and the media in reporting on educational issues and events. Examples of data uses outside of NCES during this past year are reviewed below.

Federal, state, and local governments made numerous requests for data. For example, a U.S. Senate Committee recently requested an analysis of the number of students eligible for the Free Lunch Program; state governments have requested data on teacher attrition rates and teacher information by school district; and local governments have requested analyses concerning their teacher population. In addition, a foreign government requested information on the average number of days a student attends school in a year.

The media made many requests for NCES data on elementary and secondary education also. A monthly magazine requested data on 8th grade students by family socioeconomic status; requests from a large daily newspaper included statistics on black teachers and on first-time teachers in the 1987-88 school year; and a publishing company requested additional analyses on characteristics of private schools.

Other requests included those from colleges and universities needing data on newly hired teachers and analyses on rural schools; an education association requested data and analyses on large urban school districts; a foundation asked for figures on private school special education students; and among the numerous requests from individual researchers was one on specific information on high school geometry students.

Surveys and Studies:

Common Core of Data:

The Common Core of Data (CCD) is the Center's primary database on elementary and secondary public education in the United States. CCD is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

The objectives of the CCD are twofold. First, it is to provide an official listing of public elementary and secondary schools and school districts in the nation, which can be used to select samples for other NCES surveys. Second, it is to provide basic information and descriptive statistics on public elementary and secondary schools and schooling in general.

DESIGN:

The CCD survey collects data about all public elementary and secondary schools, all local education agencies, and all state education agencies throughout the United States. CCD contains three categories of information: general descriptive information on schools and school districts; data on students and staff; and fiscal data. The general descriptive information includes name, address, phone number, and type of locale; the data on students and staff include demographic characteristics; and the fiscal data cover revenues and current expenditures.

The CCD comprises a set of five surveys sent to state education departments. Most of the data are obtained from administrative records maintained by the state education agencies (SEAs). Statistical information is collected annually on the universe of public elementary and secondary schools (approximately 87,000), public school districts (approximately 16,000) and the 50 states, the District of Columbia, and outlying areas. The SEAs compile CCD requested data into prescribed formats and transmit the information to NCES.

COMPONENTS:

The Public School Universe:

Information on all public elementary and secondary schools in operation during a school year including school location and type; enrollment by grade and student characteristics; and the number of classroom teachers.

Local Education Agency Universe:

Information for the universe of LEAs including phone number; location and type of agency; current number of students; and number of high school graduates and completers in the previous year.

State Aggregate Non-Fiscal Report:

Information on all students and staff aggregated to the state level including number of students by grade level; full-time equivalent staff by major employment category; and high school graduates and completers in the previous year.

State Aggregate Fiscal Report:

Detailed data aggregated to the state level including average daily attendance; school district revenues by source; and expenditures by function.

Early Estimates:

Early estimates of key education statistics reported by December 31 of the current school year including current student and teacher counts; current and previous year high school graduate and completer counts; and current and previous year expenditures.

POLICY AND RESEARCH ISSUES:

The five data sets within CCD can be used separately or in conjunction with one another to provide information on many topics of interest. Examples of CCD data that could be used to address important education issues are: a) size of school and pupil/teacher ratio; b) size of school district and region of the country; c) locale of school and racial/ethnic composition for selected states; d) racial/ethnic composition and pupil/teacher ratio for selected states; e) locale of school and percent of free-lunch eligible students for selected states; f) grade level and pupil/teacher ratio, g) size of school district and number of special education students; h) graduation rates; and i) state share of expenditure for education and expenditure per pupil.

Further information on CCD may be obtained from:

John Sietsema
Elementary and Secondary Education
Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1335

Schools and Staffing Survey:

School work force and teacher supply and demand information is fundamental to America's public and private schools. Yet, until 1988, there was a lack of data on characteristics of teachers and administrators and their work place conditions. The Schools and Staffing Survey (SASS) was designed to meet this need. It is a comprehensive public and private education database that combines and expands other surveys NCES has conducted in the past. SASS was conducted in the 1987-88 school year, again in 1990-91, and will be conducted at 2-year intervals hereafter. In addition, one year after each SASS, a subsample of SASS teachers will be selected for the SASS Teacher Followup Survey (see description elsewhere in this chapter).

DESIGN:

Schools are the primary sampling unit for the SASS, and a sample of teachers are selected in each school. Public school districts are included in the sample when one or more of their schools are selected. The 1990-91 SASS, like the 1987-88 SASS, includes approximately 12,800 schools (9,300 public and 3,500 private), 65,000 teachers (52,000 public and 13,000 private), and 5,600 public school districts. The survey is conducted by mail with telephone followup.

The 1990-91 public school sample was selected from the Common Core of Data public school universe list maintained by NCES. All public schools in the file were stratified by the 50 states and the District of Columbia, and then by three grade levels (elementary, secondary, and combined). A special sample of schools serving large numbers of Native American students was also drawn to provide national estimates of their schools, teachers, and principals.

The private school sample was selected in 1990-91 from the NCES 1989-90 private school universe file which consisted of a list frame of schools and a geographic area frame designed to improve coverage of schools. All private schools on the universe file were stratified by the four census regions, and within each region, schools were further stratified by three grade levels (elementary, secondary, and combined), and by 18 types of religious affiliation.

The SASS sample has been designed to support the following types of estimates and comparisons: national and state estimates for public schools and teachers; estimates for private schools and teachers at the national level and for selected groupings; national comparisons of elementary, secondary, and combined schools and teachers.

COMPONENTS:

Teacher Demand and Shortage Questionnaire:

A survey of public school districts and private schools on aggregate demand for teachers (new and continuing) by level; measures of teacher shortage; district and school policies on teacher salaries, compensation, retirement, hiring, and other factors affecting supply and demand for teachers.

School Questionnaire:

A survey of public and private schools about school programs, policies and conditions; student characteristics; staffing patterns and teacher turnover.

School Administrator Questionnaire:

A survey of public school principals and private school heads about their background characteristics and qualifications, and their perceptions of school climate and conditions.

Teacher Questionnaire:

A survey of public and private school teachers about demographic characteristics; teacher preparation and qualifications; career history and plans; teaching assignments; working conditions; and perceptions of school environment and the teaching profession.

Teacher Follow-up Survey:

See separate description elsewhere in this chapter.

POLICY AND RESEARCH ISSUES:

The data from the SASS survey will be used by Congress, the Department of Education and other federal agencies, State Departments of Education, private and other educational associations, and the education research community for the following purposes:

First, to assess critical components of teacher supply and demand, shortages and turnover in specific teaching fields, methods of covering unfilled vacancies, and policies, practices and circumstances influencing supply and demand conditions.

Second, to monitor school conditions and programs, including basic descriptors of schools, enrollments, organization, curriculum, student programs and services, staffing, student characteristics, school climate, and teacher workplace conditions.

Third, to profile the teacher work force, including demographic characteristics, academic background, qualifications to teach in fields of assignment, workload, career histories and plans, compensation, and perceptions of the teaching profession and of the workplace.

Fourth, to profile the principal work force, including demographic characteristics, academic background, qualifications, training for administration, and to assess the school climate and decisionmaking.

Further information on SASS may be obtained from:

Mary Rollefson
Elementary and Secondary Education
Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1336

SASS Teacher Followup Survey:

Another component of the Schools and Staffing Survey (SASS) is the Teacher Followup Survey (TFS). It is treated separately here because it consists of a subsample of SASS and is implemented one year after SASS. The survey identifies and collects national-level data from public and private school teachers who have remained in the same school as the previous year, as well as those who have changed schools, and those who have left the teaching profession. These data are used to provide information about teacher attrition and retention in the public and private schools and to project teacher demand.

DESIGN:

Two questionnaires comprise the TFS: a) the Teacher Followup Survey Questionnaire for Former Teachers; and b) the Teacher Followup Survey Questionnaire for Continuing Teachers, those who remained in the same school as well as those who moved to another school. These questionnaires ask teachers about their current status, occupational changes and plans, reasons for staying in (or leaving) teaching, and attitudes about the teaching profession.

The TFS was first conducted in the 1988-89 school year with a sample from the 1987-88 SASS of about 2,500 teachers who had left teaching and 5,000 who were still in teaching. Future followups will be one year after the administration of SASS which is conducted biennially. The next Teacher Followup Survey is planned for school year 1991-92.

The TFS provides information on the characteristics of persons who leave teaching, their reasons for leaving, and their current occupational status. For those persons who remain in teaching, information is gathered on their career paths. Comparisons can be made among "leavers", "stayers", and "movers" (i.e., those teachers who remain in teaching but move to another school). Sampled teachers can be linked to the SASS data to determine relationships between local district and school policies/practices, teacher characteristics, and teacher attrition and retention.

COMPONENTS:

Questionnaire for Former Teachers:

Primary occupational status; type of business; primary activity; full-time, part-time; time planning to spend in current job; new earned degrees, by type and field; plans for returning to teaching; reasons for leaving teaching; possible areas of dissatisfaction; salary; and changes in marital and family status or income.

Questionnaire for Continuing Teachers:

Primary occupational status; full-time, part-time; primary teaching assignment, by field; teaching certificate; level of students taught; school community type; reasons for leaving previous school; possible areas of dissatisfaction; new degrees earned or pursued; expected duration in teaching; level of satisfaction; marital status; number of children; academic year base salary; combined family income.

POLICY AND RESEARCH ISSUES:

The TFS can be used to address a number of issues related to teacher turnover, shortages, and availability of an adequate supply of qualified teaching personnel. Leavers, movers, and stayers will be profiled and compared in terms of teaching qualifications, working conditions, attitudes toward teaching, salaries, benefits and other incentives and disincentives for remaining in or leaving the teaching profession.

Further information on TFS may be obtained from:

Sharon A. Bobbitt
Elementary and Secondary Education
Statistics Division
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1461

The Private School Survey:

With increasing concern about alternatives in education, the interest and need for data on private education has also increased. NCES has recognized this need and has determined that a collection on private elementary and secondary schools which is comparable the Common Core of Data universe survey for public schools is an NCES priority.

The purposes of this data collection activity are to: a) build an accurate and complete list of private schools to serve as a sampling frame for NCES surveys of private schools; b) generate biennial data on the total number of private schools, teachers, and students in the universe (the next survey will be in 1991-92); and c) produce annual early estimates of private school characteristics on a fast-turnaround basis.

DESIGN:

The target population for the universe survey consists of all private schools in the United States that meet NCES criteria of a school. The survey universe is comprised of schools from a variety of sources. The main source is a list frame, initially developed for the 1989-90 Private School Survey. This frame is based on a commercial list purchased from Quality Education Data (QED), Inc. The list is updated periodically by matching it with lists provided by nationwide private school associations, state departments of education, and other national guides and sources which list private schools. The other sources are area frame searches conducted by the Bureau of the Census.

The early estimates portion of this survey is conducted with a sample of 1,200 schools, selected from the universe of schools identified from the list and area frame search operations. The selected schools will be stratified on affiliation (Catholic, other religious, and nonsectarian), and by grade level (elementary, secondary, and combined). In addition to explicit stratification on these variables, list frame schools will be sorted on region and enrollment.

COMPONENTS:

The 1991-92 Private School Survey:

Religious orientation; level of school; size of school; length of school year, length of school day; total enrollment (K - 12); number of high school graduates; number of teachers employed; schools operated in private homes; year school began operating; program emphasis.

Early Estimates:

Early estimates of key education statistics reported by December 31 of the current school year including number of schools, teachers, students, and high school graduates.

POLICY AND RESEARCH ISSUES:

The Private School Survey will produce data similar to that of the NCES Common Core of Data (CCD) for the public schools. The data will be useful for a variety of policy- and research-relevant issues, such as the growth of religiously affiliated schools, the number of private high school graduates, the length of the school year for various private schools, and the number of private school students and teachers.

For more information on the Private School Survey contact:

Elizabeth Gerald
Elementary and Secondary Education
Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1334

National Household Education Survey:

The National Household Education Survey (NHES) is the first major attempt by NCES to collect education data from a household survey. Historically, NCES has collected data from teachers, students, and schools through school-based surveys and from administrative records data through surveys of school districts and state education agencies. The NHES has the potential to address many issues in education that have not been addressed previously by NCES data collection activities.

DESIGN:

The NHES is designed as a mechanism for collecting detailed information on educational issues from a relatively large and targeted sample of households in a timely fashion. Data for the NHES are being collected through telephone interviews, a relatively new approach for gathering data related to education issues. The NHES uses Random Digit Dialing (RDD) to select households and Computer Assisted Telephone Interviewing (CATI) to collect information from household members. The sample for the NHES is drawn from the noninstitutionalized civilian population in households with a telephone in the 50 states and the District of Columbia.

During the spring of 1991, NCES fielded a full-scale NHES on early childhood education. Approximately 60,000 households were screened to identify a sample of children 3- to 8-years-old. The parents of these children were interviewed in order to collect information about their children's educational activities and the role of the family in children's learning. At the same time, an adult educational supplement was fielded (see separate description in Chapter 3). Adult household members were sampled and questioned about their participation in adult education.

Beginning in the Spring of 1993, the early childhood component will be conducted on annual basis. Other topical components will be repeated every 3 years.

COMPONENTS:

Early Childhood Component (1991):

Household members; household characteristics;
educational participation and attainment;
early childhood education;
detailed demographic characteristics.

Adult Component (1991)

See separate description in Chapter 3.

POLICY AND RESEARCH ISSUES:

The NHES is expected to provide data on a wide range of current education issues. Among the topics that may be addressed through the survey are: early childhood education, school-aged children's participation in before- and after-school programs, access and plans to finance postsecondary education, adult and continuing education, family support for and parental involvement in education, school safety and discipline, citizenship, grade retention, extra-school learning, and home-based education.

For further information on NHES contact:

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Fast Response Survey System:

The Fast Response Survey System (FRSS) was established in 1975 to collect issue-oriented data quickly and with minimum response burden. FRSS was designed to meet the data needs of Department of Education analysts, planners, and decisionmakers when information could not be collected quickly through traditional NCES surveys.

The data collected through FRSS are representative at the national level, drawing from a universe that is appropriate for the study. FRSS collects data from state education agencies and national samples of other educational sectors, including:

- Local education agencies;
- Public and private elementary and secondary schools;
- Institutions of higher education;
- Noncollegiate postsecondary schools with occupational programs;
- Public school teachers;
- Public library systems; and
- Adult literacy programs.

In order to present high quality data in a timely fashion, FRSS provides the following services: research on the survey topic and instrument design; pretest of the survey instrument; quality control of the survey data; national estimates within 1 year of survey mail-out; response rates of 90 percent or higher; tabulations and other analysis of data; and preparation and dissemination of survey reports. FRSS now has the capability of conducting brief surveys of households using Random Digit Dialing (RDD) telephone techniques.

Recent FRSS Activities:

College Level Remediation in the Fall of 1989

This survey was conducted to meet the need for information at the national level on the present extent of remediation and the characteristics of programs. This study provides the first data collected at the national level since a 1983-84 FRSS survey on the same topic. Questionnaires were mailed in late April 1989 to a sample of 502 colleges and universities, from a universe of 3,283 institutions. The overall response rate was 95 percent. The survey report presents information on remedial courses, student enrollment, and faculty teaching remedial courses. It also includes characteristics of the respondent institutions. The report was released in May 1991.

Safe, Disciplined, Drug-free Schools

Three surveys were conducted by NCES in response to National Education Goal 6: "safe, disciplined and drug-free schools by the year 2000." The surveys were designed to provide a national picture of issues related to safety, drug prevention, and discipline in elementary and secondary schools. The three surveys were mailed to samples of local education agencies, public school principals, and public school teachers in April 1991. Information was requested on the extent of discipline problems within schools, and the nature and effectiveness of current policies and drug education programs. This information is needed by policymakers and planners in order to assess how far the nation's schools are from the goal, and what must be done to achieve it. A report of the findings will be released in December 1991.

Feasibility Studies

Two studies are being conducted for offices within the Department of Education to determine the availability and accessibility of policy-oriented data required by public law. The Office of Civil Rights (OCR) requested a survey to evaluate the feasibility of gathering compliance data from school districts. OCR will use the findings of the study to redesign their biennial Elementary and Secondary School Civil Rights Survey (E&S Survey) for 1992 and the following years. The Postsecondary Education Statistics Division of NCES requested a feasibility study to determine postsecondary institutional capability to respond to data reporting requirements contained in the Student-Right-to-Know and Campus Security Act of 1990. This survey was mailed out in April 1991. The results from this survey will be a major part of a mandated report that is due to Congress from the Secretary of Education. A report will be disseminated in January 1992.

For further information on the Fast Response Survey System contact:

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NCES Items in the Current Population Survey:

The Current Population Survey (CPS) is a monthly household survey conducted by the Bureau of the Census to provide estimates of employment, unemployment, and other characteristics of the general labor force as a whole and of various subgroups of the population. Each October since the middle 1960s, CPS has included a school enrollment supplement. The supplement routinely gathers data on school enrollment and educational attainment. NCES funds the collection of the school enrollment data for 3- to 5-year-olds and persons 35 and older. NCES also regularly funds additional items on topics such as private school tuition, adult education, vocational education, early childhood education, computer usage, and student mobility.

DESIGN:

The Current Population Survey is a nationally representative probability sample survey of households. A multi-stage stratified sampling scheme is used to select sample households. The survey is conducted in approximately 60,000 dwelling units monthly in 729 primary sampling units. Dwelling units are in-sample for 4 successive months, out-of-sample for the next 8 months, and then returned to the sample for the following 4 months. An adult member of each household provides information for all members of the household.

COMPONENTS:

School Enrollment Supplement:

Household membership; household characteristics; school enrollment and attainment; demographic characteristics.

POLICY AND RESEARCH ISSUES:

The CPS provides important education data on enrollment, educational attainment, high school dropouts, retention, completion and graduation rates. It also has provided policy-relevant data on private school tuition, adult education, vocational education, early childhood education, computer usage, and student mobility.

For further information on the CPS October Supplement contact:

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Other Activities

School District Mapping:

The School District Mapping project aggregates demographic data acquired by the Bureau of the Census in the decennial census to totals for local education agencies and the states. The decennial census data are collected by census blocks which vary in size from less than a whole city block to a large portion of the state, depending upon the density of the population in the area. In the School District Mapping project, the location of each census block is identified with reference to the local education agency in which it appears, either in whole or part. The census data for these blocks or parts of these blocks are then totalled to create local education agency totals.

NCES has conducted such a program for the decennial censuses of 1970, 1980, and 1990. For 1990, the Bureau of the Census developed the Topologically Integrated Geographic Encoding and Referencing (TIGER) System, in which 10,000,000 census blocks' boundaries are digitally encoded (to six decimal places) on computer tape. The boundaries of approximately 16,000 local education agencies, plus such education-related geographic entities as special education districts, Indian reservations and military installations which have education activities within their boundaries, were similarly digitized and encoded in the TIGER system, thus making it possible to convert the data from census blocks to education entities and produce requested tabulations. NCES will provide more than 200 tabulations of state and district totals to each of the 16,000 education entities, and each state. Additionally, each state will receive a TIGER line file with digitized district boundaries.

A number of these tabulations will be reported to the Congress on April 1, 1993, as mandated in Public Law 100-297. After delivery of the report to Congress, the data will be used by the Department of Education for the allocation of various federal grant programs such as Chapter 1. NCES and education researchers and associations will use this very rich database to produce a series of analytic publications.

For further information on School District Mapping contact:

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Methodology Division
National Center for Education Statistics
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Telephone number (202) 219-1731

Cooperative System Fellows Program:

As part of its ongoing effort to increase cooperation among federal, state, and local data collectors and improve the overall quality and timeliness of education statistics, NCES initiated the Cooperative System Fellows Program in 1990. The first group of 15 Fellows, selected from state and local education agencies across the country, convened at NCES in Washington, D.C. for 1 week. During their stay, the Fellows took part in a series of planned activities including presentations by NCES staff on some of the Center's major data collections, reports and dissemination practices, projects to automate state and local data systems, and efforts to integrate existing data collections. In addition, time was set aside for the Fellows to explore their own professional interests and objectives. During their week at NCES, mentors selected from the Center's staff worked with the Fellows to lead discussions on various topics, answer questions, offer guidance and advice, and help them achieve their individual program objectives. The second week-long Fellows program was held in May 1991. It will be held twice a year in the future to accommodate additional state and local personnel who want to participate in the Fellows program. The program will also be expanded to offer the opportunity for Fellows to be in residence at NCES for extended periods of time ranging from 1 month to a year. This will provide Fellows the opportunity to pursue issues and projects in depth.

For further information on the Fellows program contact:

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The National Forum on Education Statistics:

The National Forum on Education Statistics is composed of representatives from NCES, the 50 states, the District of Columbia, the outlying territories, various federal agencies involved in the collection and reporting of education statistics, and other education associations and organizations. The Forum's primary mission is to work with NCES to improve the overall quality, timeliness, and comparability of education statistics across the Nation, as mandated by the Hawkins-Stafford Education Improvement Amendments of 1988 (Public Law 100-297).

Under the direction of its Steering Committee, the Forum maintains four standing committees: the National Education Statistics Agenda Committee; the Technology, Dissemination, and Communication Committee; the Policies, Programs, and Implementation Committee; and the Evaluation Committee. At present, the Forum committees are addressing such important issues as identifying data needs for the 21st Century; developing strategies for improving federal, state, and local data collection and reporting capability; and discussing with NCES options for new and innovative projects aimed at improving the quality of education statistics. In addition to these efforts, the Forum is available to respond to specific requests from the Commissioner of NCES, and to raise issues and make recommendations of its own. By bringing federal and state representatives together to work cooperatively toward improving the quality of education statistics, the Forum plays an important role in determining the future of our nation's education statistics system.

In 1990, the National Forum issued its first publication, the *Guide To Improving the National Education Data System*. The *Guide* contains 36 recommendations for improving the nation's elementary and secondary education statistics system. This proposed national education data agenda is the product of a broad-based, consensus-building process that brought together representatives of state and federal education agencies and of organizations with a major interest in education data. Together they agreed on the types of improvements that are most important for enhancing the usefulness of the education database.

For further information on the National Forum contact:

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National Data Resource Center:

NCES has established the National Data Resource Center (NDRC) to enable state education personnel, education researchers, and others to request special statistical tabulations and analyses by performing statistical manipulation of data sets maintained by NCES. This service currently is provided free of charge by NCES.

Researchers and others may ask the Data Center to perform specific tabulations or analyses, or they may work on-site directly with confidential data files. The Data Center has developed strict procedures, including computerized tests, to ensure that individuals in surveys cannot be identified from NCES data files. No data which could be used to identify an individual who supplied that data will be released.

Among the services the Data Center provides are limited programming analysis, as well as other support services. The Data Center also develops its own statistical tables, graphic materials, and analysis in anticipation of major data needs of education policymakers, researchers, and others.

Currently, the Data Center has files available from the Common Core of Data, the 1988 National Educational Longitudinal Study, and the Schools and Staffing Survey (see descriptions of these surveys elsewhere in this publication). In the future, the Data Center plans to add additional databases to its inventory and to link several of these files, enabling researchers to perform higher level analyses.

For further information on the National Data Resource Center contact:

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Plans for Elementary and Secondary Education:

The major elementary and secondary surveys of NCES—the Common Core of Data (CCD), the National Education Longitudinal Study of 1988 (described in Chapter 5), the National Household Education Survey (NHES), the Fast Response Survey System (FRSS), the Schools and Staffing Survey (SASS), and the Private School Survey (PSS)—will be continued. Additionally, topical supplements may be attached to these surveys so that current data on key issues can be produced. Other changes may be made also improve the data.

One innovation underway in the CCD is the redesign and expansion of the fiscal collection component. The new state survey, entitled the National Public Education Financial Survey, greatly expanded the financial information reported by states, beginning in fiscal year 1990. NCES envisions the first publication of this more comprehensive and policy-relevant information about state public education spending to occur by December 1991.

A second aspect of the CCD fiscal redesign is to collect and report school district financial information. In September 1990, NCES conducted a joint NCES/Bureau of the Census school district fiscal collection from state administrative records on the universe of 16,000 school districts. The joint 1990 collection only slightly expanded the Census Bureau's traditional school district financial survey form to collect core instructional expenditures as recommended by the Council of Chief State School Officers (CCSSO). NCES and the Census Bureau plan a major expansion of the Census Bureau's Survey of Local Government Finances in September 1992. This ambitious collection effort would add about 30 items to the survey, many for the first time. Consensus-building steps used for the state-level CCD survey, such as having items reviewed by state education associations and academic task forces, have been occurring for the first 1992 joint school district collection.

The school district financial data set from the 1990 joint NCES/Census collection, when completed, will be combined with community characteristics from the decennial census when the NCES school district mapping project is complete. Some of the items to be included on the combined data set are: at-risk students, community characteristics, occupation, and income. The initial release of the 1990 school district level financial data is envisioned for December 1991, and combined with decennial census information in 1993.

Under the umbrella of the National Cooperative Education Statistics System, all states have worked with NCES to increase the comparability and uniformity of elementary and secondary education data. Several items of particular interest have been dropouts, school completers, and school staff data. In 1992-93, states will begin reporting on the CCD counts of dropouts, using specifications determined through the 1989-90 field test of a dropout definition and data collection procedure. The CCD will also collect and report more detailed breakouts of the numbers of school and school district staff providing instructional, support, and administrative services. School completers data will be uniformly reported across states so that the numbers of students receiving traditional and alternative graduation credentials can be easily assessed.

Over the next 3 years, the National Cooperative Education Statistics System will also assist the states in conducting feasibility studies and developing plans for automating their data systems. The focus will be on improving the quality and comparability of state data systems so that information can be shared and aggregated at the national level. During this period, extra

resources will be provided to the outlying areas to enable them to bring their systems up to par with the states.

Beginning in the spring of 1993, the NHES will be conducted on an annual basis. Each data collection will include at least two topical components, one of which will be an early childhood component. The concept of "school readiness" will be emphasized in the 1993 early childhood component. To monitor change over time, current plans call for repeating other topical components every third year. Other topical components planned for inclusion in NHES are: adult and continuing education (1991 and 1994); school safety and discipline (1993 and 1996); and citizenship (1995 and 1998). In the future, data collected by NHES may be enhanced by a longitudinal component, a second annual survey in the fall, or a sample to provide state-level estimates. Data collected by NHES may also be combined with data from other household surveys such as the Current Population Survey (conducted by the Census Bureau).

In an attempt to be responsive to the information needs of the many education constituency groups below the postsecondary level, NCES is currently planning two new longitudinal studies. For more information on the Early Childhood Longitudinal Study (ECLS) and the National Education Longitudinal Study of 1996 (NELS:96), see the section on *Plans for Longitudinal Studies* in Chapter 5. In addition, a longitudinal component will be added to the SASS Teacher Follow-up Survey. The teachers selected for the followup in the 1993-94 school year will be contacted for additional information at 2-year intervals at least three times.

In the summer of 1991, staff working on SASS began a process that will lead to a more focused program of survey evaluation and research. SASS staff working with Census Bureau staff and the academic community will develop a research plan and begin work in a number of areas such as the development of sampling frames and the evaluation of their completeness, research into sampling issues associated with student and parent samples in SASS, and an exploration of alternative weighting schemes for SASS. Other research topics to be explored include reviewing ways to increase survey response rates, characterizing various classes of nonrespondents, and improving questionnaire concepts and wording. Finally, the program will encourage substantive analysis and data evaluation by the research and academic communities, and will develop a SASS Quality Profile, a review of what is known about the sampling and nonsampling errors in SASS.

Elementary and Secondary Education Statistics

Selected Publications and Tabulations:

FRSS: Public High School Principals' Perceptions of Academic Reform (May 1988)
FRSS: Public School District Policies and Practices in Selected Aspects of Arts and Humanities Instruction (May 1988)
Salary Structures for Public School Teachers, 1984-85 (June 1988)
FRSS: Services and Resources for Young Adults in Public Libraries (July 1988)
Secondary School Teacher's Opinions: Public and Private (September 1988)
Trends in Real Public Elementary and Secondary Revenues, 1981-82 to 1985-86 (September 1988)
Dropout Rates in the United States (Annually in September)
Background and Experience Characteristics of Public and Private School Teachers, 1984-1985 (October 1988)
FRSS: State Policies Concerning Vocational Education (November 1988)
Moonlighting among Public School Teachers (December 1988)
FRSS: Education Partnerships in Public Elementary and Secondary Schools (February 1989)
Teacher Compensation: A Comparison of Public and Private School Teachers, 1984-1986 (March 1989)
Teacher Incentive Programs in Public Schools (April 1989)
What Teachers Majored In: Bachelor's Degree Fields of Public and Private School Teachers (May 1989)
Time Allocation Patterns of Teachers in Public and Private Schools, 1984-86 (July 1989)
FRSS: Use of Educational Research and Development Resources by Public School Districts (March 1990)
FRSS: Services and Resources for Children in Public Libraries, 1988-89 (March 1990)
E.D. TABS: Characteristics of Private Schools, SASS (May 1990)
E.D. TABS: Selected Characteristics of Public and Private School Administrators, 1987-88 (May 1990)
Selected Data on Minority Participation in Public Schools (July 1990)
E.D. TABS: Comparisons of Public and Private Schools, 1987-88 (July 1990)
E.D. TABS: Selected Characteristics of Public and Private School Teachers, 1987-88 (July 1990)
E.D. TABS: Early Estimates of Public and Private Elementary and Secondary Education, School Year 1990-91 (December 1990)
Private Schools in the United States: A Statistical Profile, with Comparisons to Public Schools (February 1991)
Comparison of State Methods for Collecting, Aggregating and Reporting State Average Daily Attendance Totals (April 1991)
E.D. TABS: Public Elementary and Secondary Education Agencies in the United States and Outlying Areas, School Year 1989-90 (April 1991)

E.D. TABS: Public Elementary/Secondary State Aggregate Nonfiscal Data, by State, for School Year 1989-90 (April 1991)

E.D. TABS: Characteristics of the 100 Largest Public Elementary and Secondary School Districts in the United States, 1988-89 (May 1991)

SASS 1987-88 Sample Design Methodology Report (May 1991)

E.D. TABS: Characteristics of Stayers, Movers, Leavers: Results from the Teacher Followup Survey, 1988-89 (June 1991)

Key Statistics on Public Elementary and Secondary Education, Reported by State, and by Regional, Local and Wealth Clusters, 1988-89 (June 1991)

E.D. TABS: Aspects of Teacher Supply and Demand in Public School Districts and Private Schools, 1987-88 (August 1991)

E.D. TABS: Teacher Follow-up Survey, 1988-89 (August 1991)

Statistics In Brief: Home Activities of 3- to 8-Year-Olds: National Household Education Survey (August 1991)

Statistics in Brief: Experiences in Child Care and Early Childhood Programs of First and Second Graders Prior to Entering First Grade: Findings From the 1991 National Household Education Survey (August 1991)

Issue Brief: Eighth to Tenth Grade Dropouts, NELS:88 (August 1991)

FRSS: Teacher Survey on Safe, Disciplined, and Drug-Free Schools (September 1991)

NHES Technical Report on Field Test Dropout Survey (Forthcoming)

Directory of Public Elementary/Secondary Education Agencies, 1989-90 (Forthcoming)

Data Files:

Common Core of Data Public Education Agency Universe, 1989-90 (February 1991)

Common Core of Data Public School Universe, 1989-90 (February 1991)

1987-88 Schools and Staffing Survey: Public and Private School Questionnaires (March 1991)

1987-88 Schools and Staffing Survey: Public and Private School Teacher Questionnaires (April 1991)

1987-88 Schools and Staffing Survey: Public and Private School Administrator Questionnaires (April 1991)

Public Elementary and Secondary School Revenues and Current Expenditures: FY 82-88 (April 1991)

National Public Education Financial Survey: FY89 (April 1991)

1987-88 Schools and Staffing Survey: Public and Private Teacher Demand and Shortage Questionnaires (May 1991)

Public Elementary and Secondary School Membership, Graduates, and Staff, by State: School Years 1983-84 through 1989-90 (May 1991)

Elementary and Secondary Education

Surveys	*Year of Data Collection*								
	1988	1989	1990	1991	1992	1993	1994	1995	1996
Common Core of Data									
The Public School Universe	X	X	X	X	X	X	X	X	X
Local Education Agency Universe	X	X	X	X	X	X	X	X	X
State Aggregate Non-Fiscal Report	X	X	X	X	X	X	X	X	X
State Aggregate Fiscal Report	X	X	X	X	X	X	X	X	X
Early Estimates	X	X	X	X	X	X	X	X	X
Schools and Staffing Survey									
Teacher Demand and Shortage Questionnaire	X			X		X		X	
School Questionnaire	X			X		X		X	
School Administrator Questionnaire	X			X		X		X	
Teacher Questionnaire	X			X		X		X	
SASS Teacher Followup Survey		X			X		X		X

	Year of Data Collection								
	1988	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Private School Survey									
Universe Survey			X		X		X		X
Early Estimates			X	X	X	X	X	X	X
National Household Education Survey				X		X	X	X	X
CPS School Enrollment Supplement	X	X	X	X	X	X	X	X	X

3

Postsecondary Education

Social, demographic, educational, and economic issues challenge postsecondary education today. Among the most critical are questions pertaining to access to postsecondary education for various populations, the effects of shifting enrollment patterns, the cost of postsecondary education, student financing of postsecondary education, education outcomes, the long range financial outlook for colleges and universities, demand for and the supply of qualified faculty and staff, and job opportunities for graduates.

The NCES program in postsecondary education provides statistical information used by planners, policymakers, and educators in addressing these issues. One major source of this information is the Integrated Postsecondary Education Data System (IPEDS), an annual series of surveys conducted by NCES, that provides a variety of data on the Nation's 10,500 public and private postsecondary institutions. Complementing IPEDS are special studies of recent college graduates, student financial aid, postsecondary faculty, and doctorates. In addition, postsecondary education transcript studies have been conducted in conjunction with the National Longitudinal Study of 1972, the High School and Beyond Study, and the Beginning Postsecondary Study (descriptions of these studies are in Chapter 5). Another postsecondary longitudinal survey system, Baccalaureate and Beyond, is being developed to collect institutional and student data from postsecondary students over a period of several years (see the Plans section of Chapter 5).

Data Uses:

The NCES higher education data systems provide such information as trends in the enrollment and degree completion of women and minorities; patterns of expenditures and revenues of institutions; patterns of student financial aid; workload of faculty; and the relationship between educational experience and labor market outcomes. These data are used to describe the condition of postsecondary education, and to monitor any changes. Federal program staff have used IPEDS and student aid survey data to address policy issues on financial aid programs. Policymakers at the state level have used IPEDS data for planning purposes. Government commissions have used these data to monitor compliance with federal legislation.

Thousands of requests for information, based on the Integrated Postsecondary Education Data System (IPEDS), and other postsecondary programs, are received by the Center each year. Those requesting data fall roughly into seven categories: 1) federal agencies; 2) state agencies; 3) national and regional education associations; 4) individual institutions; 5) the media; 6) the business community; and 7) the general public.

Members of the executive branch, Congress or congressional committees and a number of independent federal agencies use information from the Center on a regular basis. For example,

an office of the legislative branch used IPEDS information to develop a profile of proprietary, less-than-2-year institutions. Several executive branch offices use the information to track baccalaureate and higher degree data by selected fields of study and minority status of degree recipients. An independent federal agency uses the information to track degree completions in engineering and scientific fields of study.

State higher education agencies regularly use the data to help determine salary and fringe benefits packages for their full-time instructional staff. Other state agencies use the completions and institutional data on an annual basis to update their files on the availability of specific career training programs. Several state agencies have used the residence and migration data to determine where their high school graduates enroll in postsecondary education institutions.

National and regional education associations annually request tabulations to determine enrollment patterns by racial/ethnic categories and fields of study, and finance data to review the economic health of postsecondary education institutions. Individual institutions use similar information at an institutional level for peer analyses. These analyses range from comparing selected financial ratios to proportions of minority student enrollments and are used for institutional planning purposes.

The media, business community and the general public use the information in a variety of ways. For example, one newspaper has used the data to develop a major article that compares public 4-year institutions across selected states. Members of the business community have used degree completions data to target minority recruitment efforts in selected fields of study. The general public regularly requests information on which institutions offer degrees in specific fields of study.

Surveys and Studies:

Integrated Postsecondary Education Data System:

NCES has established the Integrated Postsecondary Education Data System (IPEDS) as its core postsecondary education data collection program. It is a single, comprehensive system that encompasses all identified institutions whose primary purpose is to provide postsecondary education. IPEDS supersedes the Higher Education General Information Survey (HEGIS). From 1965-1986 HEGIS collected data only from institutions that were accredited by an accrediting organization recognized by the Secretary of Education.

DESIGN:

IPEDS defines postsecondary education as the provision of formal instructional programs whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent. This includes programs whose purpose is academic, vocational and continuing professional education, and excludes avocational and adult basic education programs. IPEDS includes the following types of institutions: baccalaureate or higher degree granting institutions, 2-year award institutions, and less-than-2-year institutions (i.e., institutions whose awards usually result in terminal occupational awards, or are creditable toward a formal 2-year or higher award). Each of these three categories are further disaggregated by control (public, private nonprofit, and private for-profit) resulting in nine institutional categories or sectors.

IPEDS employs several new concepts in the collection of postsecondary institutional education data. Data element definitions are relevant to all providers of postsecondary education and consistent among components of the system that have been formulated and tested. A set of data elements have been established to identify characteristics common to all providers of postsecondary education. Specific data elements have been established to define unique characteristics of different types of providers of postsecondary education. Interrelationships among various components of IPEDS have been established to avoid duplicative reporting and enhance the policy relevance and analytic potential of the data. IPEDS has also recognized the problems involved in trying to make inter-state and inter-institutional comparisons using the NCES postsecondary data and has addressed many of these problems through the use of clarifying questions—questions that ask what was or was not included in a reported count or total.

Finally, specialized but compatible reporting formats have been developed for the different sectors of postsecondary education providers. In general, the reports developed for postsecondary institutions granting baccalaureate and higher degrees are the most extensive; forms for the 2-year, and less-than-2-year award granting sectors request less data. This design feature accommodates the varied operating characteristics, program offerings, and reporting capabilities which differentiate postsecondary institutional sectors while, at the same time, yielding comparable statistics for some common parameters for all postsecondary sectors.

Data are collected from approximately 10,500 postsecondary institutions. IPEDS has been designed to produce national, state, and institutional level data for most postsecondary institutions. However, only national level estimates from a sample of institutions are available for the private, less-than-2-year institutions. Early estimates of fall enrollment are also only produced from a sample at the national level.

COMPONENTS:

Institutional Characteristics:

Address; congressional district; county; telephone number; year established; tuition; control or affiliation; calendar system; highest degrees offered; type of programs; credit and contact hour data; and accreditation.

Fall Enrollment:

Full- and part-time enrollment by sex for undergraduates, first professional degree and graduate students, and and unclassified students. Annual racial/ethnic data. Age distributions in odd-numbered years. First-time degree-seeking student enrollments by residence status in even-numbered years.

Fall Enrollment in Occupationally Specific Programs:

Fall enrollment in occupationally specific programs, by sex and race/ethnicity in odd-numbered years.

Completions:

First professional degrees, by field; bachelor's, master's, and doctor's degrees, by disciplines; and associate degrees and other formal awards based on less than 4 years of work beyond high school. Degree data by race/ethnicity and by sex are collected annually.

Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty:

Full-time instructional faculty by rank, sex, tenure status, and length of contract; salaries and fringe benefits of full-time instructional faculty.

Financial Statistics:

Current fund revenues by source (e.g., tuition and fees, government, gifts); current fund expenditures by function (e.g, instruction, research); assets and indebtedness; and endowment investments.

College and University Libraries:

Name, address, and telephone number; number and salaries of full- and part-time staff, by sex and position; circulation and interlibrary loan transactions; book and media collections; hours and days of service; operating expenditures by purpose. Data are collected in even-numbered years.

Early Estimates:

Provides estimates during the same semester (i.e., fall) that data are collected on enrollment, degrees, and finance.

POLICY AND RESEARCH ISSUES:

IPEDS provides a wealth of institutional-level data for analyzing the state of postsecondary education institutions. For example, IPEDS data can be used (with HEGIS data) to describe long-term trends in higher education. IPEDS also supplies the data necessary for conducting and interpreting special studies of postsecondary students, faculty, and staff. Using IPEDS data, policymakers and researchers can analyze postsecondary data on: the number of students, graduates, first-time freshmen, graduate and professional students by race/ethnicity, and sex; the status of postsecondary vocational education programs; the number of individuals trained

in certain fields, by sex, race/ethnicity and level; the resources generated by postsecondary education; completions by type of program, level of award, race/ethnicity, and sex; the level of compliance with government regulations, and many other issues of interest.

For further information on IPEDS contact:

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National Household Education Survey (Adult Education Component):

With increased attention being paid to adult learning, as a result of the National Education Goals, and the ongoing concern regarding America's ability to compete in a global economy, there has been a heightened interest in more accurate data on the educational activities of the adult population. The National Household Education Survey (NHES) provides the opportunity to collect information on a wide range of adult education experiences. The adult education component of NHES was implemented in the spring of 1991. (For more information on the other components, see the NHES description in Chapter 2.)

DESIGN:

The adult education component in the 1991 NHES was, for the most part, adapted from the previous Current Population Survey (CPS) adult education supplements. However, unlike the CPS, it collects information on both adult education participants and non-participants. At present, NCES plans to field the adult education component once every 3 years after 1991. The NHES survey will identify and screen more than 60,000 households, with an oversampling of black and Hispanic households at a rate of 2 to 1. A knowledgeable adult will be asked a series of questions to screen all household members for adult education participation in a sample of about 20,000 of these 60,000 households resulting in interviews with approximately 9,800 adult education participants and 2,750 non-participants.

COMPONENTS:

NHES Adult Education:

Household membership and individual characteristics; participation in adult education; type of program (vocational, occupational, basic skills, etc.); reasons for taking courses and barriers to participation in adult education.

POLICY AND RESEARCH ISSUES:

The adult component of the NHES can be used to address many questions about the patterns of participation by demographic and labor force characteristics. It will include data on reasons for taking courses, on the providers of the courses, and the cost of the courses. Information also will be collected from non-participants concerning barriers to their participation.

For more information on the NHES Adult Education Component contact:

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Recent College Graduates Study:

The General Education Provisions Act, 20 USC 1221e-1, Section 406(b)(5) states that NCES shall "conduct a continuing survey...to determine the demands for and availability of qualified teachers...in critical areas within education." The Recent College Graduates Study (RCG) estimates the potential supply of newly qualified teachers. It is a study of the immediate post-degree employment and education experiences of persons who obtained a bachelor's or master's degree from an American college or university, with a heavy emphasis on those graduates qualified to teach at the elementary and secondary levels.

The RCG has been conducted periodically since 1976. In 1993, NCES will establish a longitudinal survey of graduating college seniors, which will replace the RCG Study. This survey, Baccalaureate and Beyond, will follow an oversample of graduating seniors from the National Postsecondary Student Aid Study.

DESIGN:

Data from the RCG study are representative at the national level. The sample is drawn from the universe of students within 1 year of attaining a bachelor's or master's degree. The 1991 RCG study used a two-stage sampling design. The first stage consisted of drawing a sample of 400 bachelor's and master's degree-granting institutions from 1,978 institutions in the 1988-89 IPEDS survey of earned degrees file. Institutions were stratified by control (public or private) and by degrees awarded in the field of education (over or under a specified number). Within each of these four strata, institutions were selected according to size (size being measured by the sum of bachelor's and master's degrees awarded that year).

The second stage of the 1991 RCG design called for the selection of a core sample of 18,000 graduates (16,000 bachelor's degree recipients and 2,000 master's degree recipients between July 1, 1988 and June 30, 1989) from the 400 sampled institutions. Simple random samples of graduates were selected from each defined subgroup (i.e., by field of study). The graduates included in the sample were selected in proportion to the institution's number of graduates. Graduates whose major fields of study were education, mathematics, and the physical sciences were sampled at a higher rate as were minority graduates to provide a sufficient number of these graduates for analysis purposes. Graduates were surveyed 1 year after receiving a degree.

The RCG studies are designed to meet certain objectives: a) to determine how many graduates become eligible or qualified to teach for the first time, and how many were employed as teachers in the year following graduation, by teaching fields; and b) to examine the relationship between courses taken, student achievement, and occupational outcomes. The 1987 study also obtained information from college transcripts regarding types and patterns of courses taken by all baccalaureate degree recipients that year in their major field of study.

COMPONENTS:

Recent College Graduates:

Date of graduation; field of study; graduates newly qualified to teach; further enrollment; financial aid; employment status (especially teacher employment characteristics); job characteristics and earnings; age; marital status; sex and race/ethnicity.

POLICY AND RESEARCH ISSUES:

The supply of new teachers and the demand for their teaching services has changed dramatically over the past two decades. Because the RCG provides estimates of one source of teachers, the data from this survey are of interest not only to federal policymakers, but to many elementary and secondary schools throughout the country, as well. The RCG studies can be used to obtain data on: a) the number and percent of recent graduates who are qualified to teach, and who enter the teaching profession; b) the kinds of jobs recent college graduates are getting by program area or major field; c) the extent to which graduates get jobs in the area of their major field; d) the extent to which jobs differ for men and women who graduate in the same program or major field; e) unemployment of graduates; and f) jobs obtained by baccalaureate or master's degree recipients that do not require a 4-year college degree.

For further information on the Recent College Graduates Study contact:

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National Postsecordary Student Aid Study

The U.S. Department of Education provides some type of financial assistance to about one in every three students attending a postsecondary institution, and spends more than $8 billion annually in this effort. The National Postsecondary Student Aid Study (NPSAS) is the most comprehensive nationwide study of how students and their families pay for postsecondary education. It includes nationally representative samples of undergraduates, graduates, and first-professional students; students attending less-than-2-year institutions, 2- and 3-year schools, 4-year colleges, and universities. Students who receive financial aid as well as those who do not receive aid, and a sample of their parents, participate in NPSAS. Results of the study are used to help determine future federal policy regarding student financial aid. The National Center for Education Statistics conducts the study every 3 years.

The first NPSAS was conducted during the 1986-87 school year. Data were gathered from institutional records on about 60,000 students at 1,100 colleges, universities, and other postsecondary institutions. About 43,000 of these students and 13,000 parents also completed a questionnaire. These data provided information on the cost of postsecondary education, the distribution of financial aid, and the characteristics of both aided and nonaided students and their families. Three major reports will be produced each cycle: *Undergraduate Financing of Postsecondary Education*, *Student Financing of Graduate and Professional Education*, and *Profile of Undergraduates in American Postsecondary Institutions*. The second NPSAS was conducted during the 1989-90 school year.

DESIGN:

The design for the NPSAS samples in 1987 and 1990 involved three stages of sampling: area sampling, institution sampling, and student sampling. Area sampling was necessary to ensure coverage of all postsecondary institutions within sampled areas. IPEDS/HEGIS and Pell campus-based files were merged to produce a national frame of postsecondary schools. School ZIP codes were used to develop primary sampling units (PSUs). PSUs were stratified by state and institutional enrollment within the state. With the exception of four states, each state contained at least one PSU. The same 120 PSUs selected in the 1987 NPSAS were used in the 1990 NPSAS. For the 1990 NPSAS, Puerto Rico was also included as a PSU.

Within PSUs, institutions were sampled. To be eligible for inclusion in the institutional sample, an institution must have satisfied the following conditions: 1) offered an education program designed for persons who have completed secondary education; 2) offered an academic, occupational, or vocational program of study; 3) offered access to persons other than those employed by the institution; 4) offered more than just correspondence courses; 5) offered at least one program lasting 3 months or longer; and 6) been located in the 50 states or the District of Columbia (Puerto Rico was included in 1990). From the sampled institutions, 1,074 schools participated in 1987 (about 95 percent); and about 1,130 (91 percent) participated in 1990. The 1990 NPSAS sample included 70,000 students and 20,000 parents.

NPSAS data come from multiple sources, including institutional records and student and parent interviews. Detailed data concerning participation in student financial aid programs were

extracted from school records. In 1987, family circumstances, background demographic data, and plans and aspirations were collected using student and parent questionnaires. For the 1990 NPSAS, student and parent data were collected using computer-assisted telephone interviewing (CATI). The 1987 NPSAS included an out-of-school component which identified the number of years out of school, and repayment status.

Unlike the 1987 NPSAS, which only sampled students enrolled in the fall of 1986, the 1990 NPSAS sample included about 10,000 students who were enrolled during the 1989-90 school year at times other than the fall. This design change will provide the data necessary to estimate full-year financial aid awards.

COMPONENTS:

Student Record Abstract (from institutional records):

Year in school; major field of study; type and control of institution; financial aid; cost of attendance; grade point average; age; sex; race/ethnicity; marital status; income; employment and salary.

Student Interview:

Level; major field of study; financial aid; cost of attendance; reasons for selecting the school they are attending; current marital status; highest degree expected; employment and income; community service.

Parent Survey:

Parents' race/ethnicity; marital status; age; occupation and industry; highest level of education achieved; income; amount of financial support provided to children; types of financing used to pay child's educational expenses.

The Out-of-School Student Loan Recipient Survey (1987-1988 only):

Major field of study; years attended and degrees received (if any); type and control of institution; financial aid; repayment status; age; sex; race/ethnicity; marital status; income; and employment history (occupation, industry, and salary).

POLICY AND RESEARCH ISSUES:

NPSAS covers a number of topics of interest to policymakers, educators and researchers such as the participation of students in financial aid programs. The goal is to identify institutional, student, family, and other characteristics related to program participation. Data are also available on special population enrollments in postsecondary education, including students with handicaps, racial and ethnic minorities, remedial students, disadvantaged students, and older students. Another component of NPSAS is the study of the distribution of students by major field of study. Of particular interest are mathematics, science, engineering, as well as teacher preparation and health studies. NPSAS generates data on factors associated with choice of postsecondary institution, participation in postsecondary vocational education, parental support for postsecondary education, and occupational and educational aspirations and plans of postsecondary students.

For more information on the National Postsecondary Student Aid Study contact:

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National Survey of Postsecondary Faculty:

The quality of postsecondary education is directly affected by faculty and instructors in postsecondary institutions. However, there has been little comprehensive current information on this professional body, and the major issues that face them as educators, researchers, and members of the work force. The National Survey of Postsecondary Faculty (NSOPF) was designed to remedy this situation. This study, which is cosponsored by the National Endowment for the Humanities, provides reliable and current data in a variety of areas for postsecondary education researchers, planners, and policymakers. NSOPF is the most comprehensive study of faculty in postsecondary educational institutions ever undertaken.

DESIGN:

The NSOPF was conducted by NCES for the first time in the 1987-88 academic year. There were three major components of the study: a survey of institutional-level respondents in a stratified random sample of 480 institutions; a survey of a stratified random sample of 11,013 eligible faculty members within the participating institutions; and a survey of a stratified random sample of 3,029 eligible department chairpersons (or their equivalent) within the participating institutions. Response rates to the three surveys were 88 percent, 76 percent, and 80 percent, respectively.

The universe from which the institutions were selected included all nonproprietary U.S. postsecondary institutions who grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education. This includes religious, medical, and other specialized postsecondary institutions, as well as 2- and 4-year non-specialized institutions. According to the 1987 Integrated Postsecondary Education Data System (IPEDS), this universe comprised 3,159 institutions.

The 1988 NSOPF gathered information regarding the backgrounds, responsibilities, workloads, salaries, benefits, and attitudes of both full- and part-time faculty in their postsecondary institutions. In addition, information was gathered from institutional and department-level respondents on such issues as faculty composition and turnover and recruitment, retention, and tenure policies. The survey will be repeated in the 1992-93 academic year so that changes over time in institutional policies and faculty characteristics, behaviors, and attitudes can be assessed. At this time, the program will be renamed the National **Study** of Postsecondary Faculty.

COMPONENTS:

Institutional Survey:

Counts of faculty by rank; faculty hires and departures; tenure of faculty; tenure policies; retirement and other benefits for faculty.

Department Chair Survey:

Faculty composition in department; tenure of faculty in department; tenure policies; rank; gender, and minority/nonminority status of faculty in department; faculty hires and departures in department; hiring practices; activities to assess teacher performance; professional and developmental activities.

Faculty Survey:

Sociodemographic characteristics; academic and professional background; field of teaching; employment history; current employment status including rank and tenure; outside employment; workload; courses taught; job satisfaction and attitudes; career and retirement plans; benefits and compensation.

POLICY AND RESEARCH ISSUES:

The NSOPF contains data which can be applied to policy and research issues related to postsecondary faculty. For example, NSOPF can be used to analyze whether the postsecondary labor force is declining or increasing. NSOPF data also can be used to analyze faculty job satisfaction and how it correlates with an area of specialization; how background and specialization skills relate to present assignments. Comparisons can be made on academic rank and outside employment. Benefits and compensation can also be studied across institutions, and faculty can be aggregated by sociodemographic characteristics.

For more information on the National Survey of Postsecondary Faculty contact:

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Survey of Earned Doctorates Awarded in the United States:

This survey has collected basic statistics from the universe of doctoral recipients in the United States each year since the 1920s. It has been supported by five federal agencies: The National Center for Education Statistics in conjunction with the National Science Foundation, the National Endowment for the Humanities, the Department of Agriculture, and the National Institutes of Health.

DESIGN:

Survey forms are mailed to graduate deans each May for distribution to individuals receiving their doctorates between July 1 and June 30 of the next year. The data are collected, edited, and published by the National Academy of Sciences (NAS). By the end of the summer, the NAS publishes general survey results in a summary report and in a four-page flyer. Detailed tabulations are also provided to each sponsoring agency by NAS. This on-going survey is designed to produce national level data. It draws data from the universe of all doctoral degree recipients.

COMPONENTS:

Survey of Earned Doctorates:

Sex; age; race/ethnicity; marital status; citizenship; handicaps; dependents; specialty field of doctorate; all institutions attended from high school to completion of doctorate; time spent in completion of doctorate; source of financial support for graduate study; education debt incurred; postdoctoral plans; educational attainment of parents.

POLICY AND RESEARCH ISSUES:

From the Survey of Earned Doctorates data, it is possible to determine whether the number of doctoral recipients is increasing or decreasing, by field of study. The various sources of financial aid for doctoral students can be assessed, as can the average time it takes to complete the degree. Future or present employment can be studied, which could be very useful information for postsecondary institutions and research facilities. Trend data on who is receiving doctorates, by sex and race/ethnicity can be analyzed also.

For more information on the Survey of Earned Doctorates contact:

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Postsecondary Education Quick Information System (PEQIS):

Policy analysts, program planners, and decision makers in postsecondary education occasionally need data on emerging issues quickly. It is not always feasible for NCES to use its large, recurring surveys to provide such data due to the length of time required to implement large-scale data collection efforts. NCES has established PEQIS to collect data quickly on focused issues needed for program planning and policy development with minimum burden on respondents. PEQIS surveys might be used to assess the feasibility of developing large-scale data collection efforts on a topic, to supplement other NCES postsecondary surveys, or to obtain information quickly on an emerging issue.

DESIGN:

The PEQIS will employ a standing sample (panel) of approximately 1,500 postsecondary education institutions and a panel of 51 state higher education agencies. The institutional panel sample is to be drawn and recruited by November 1991, and the first survey initiated in December 1991. Some areas under consideration for PEQIS surveys are: efforts to improve undergraduate education (revision of admission standards, institution-based student assessment, revision of core-curriculum); efforts to increase minority student achievement; hiring practices regarding new full-time faculty; distance learning; reforms of teacher education programs; computer-assisted learning; and the adequacy of physical facilities.

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Other Activities:

Postsecondary Coordination Activities

SHEEO/NCES Postsecondary Education Coordination Network

This project provides coordination and communication between NCES and state postsecondary education agencies to enhance and expedite NCES data collection and dissemination activities. Project activities include meetings with the Network Advisory Committee and an annual national meeting with the Network representatives from the SHEEO agencies. The Network issues a quarterly bulletin containing information about NCES and state activities, provides an advisory service summarizing education issues and related data needs, and maintains a library service with information from state data collections. In addition, there is a personnel exchange service that provides funds for staff of state education agencies to visit each other to share technical assistance information regarding their data collection and dissemination activities. The Network Director visits state agencies, postsecondary association meetings, and makes recommendations regarding new and developing issues in need of national data to provide information for the education community.

Panel on Postsecondary Education

The American Council on Education coordinates three annual meetings of representatives from postsecondary education associations, colleges and universities, state education agencies, and other federal agencies. Topics for discussion include Postsecondary Education Statistics Division projects in the planning and developmental stages and new postsecondary issues which may affect NCES data collections.

Plans for Postsecondary Education:

NCES will continue collecting data for all IPEDS components, including the Early Estimates System. However, the forms used to collect the data will be modified starting in 1993. State and institutional representatives will review and discuss these changes at an IPEDS workshop in FY 1992. IPEDS will continue to provide a sampling frame for other postsecondary surveys such as the National Postsecondary Student Aid Study. NCES is currently implementing the Postsecondary Education Quick Information System to collect data for addressing emerging and focused issues that the ongoing data collection systems are unable to provide.

Other plans call for NPSAS to serve as the base for two new postsecondary longitudinal surveys: Beginning Postsecondary Students (BPS) and Baccalaureate and Beyond (B&B). The BPS survey began in 1990 and is described in Chapter 5. B&B will study the educational and work-related achievements of a postsecondary graduating cohort as they continue on into graduate or professional education, or enter the work force. Since this new study will be a longitudinal survey and will not begin until 1993, it is discussed in the "Plans" section of Chapter 5.

In the October 1991 CPS School Enrollment Supplement, some questions will be added on student mobility in postsecondary education. For example, has the student transferred from one school to another and why?

In addition to the new studies, two work groups are continuing data development activities that were started in 1991. One group is developing a plan to assess postsecondary student learning to obtain measures for monitoring postsecondary student performance. The other group is developing postsecondary education price and cost indexes. The institutional price index will be used to track changes in the prices of postsecondary education goods and services. The student cost index will measure changes in the tuition, living, and other costs to students to attend postsecondary institutions.

Postsecondary Education Statistics

Selected Publications and Tabulations:

Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study (June 1988)
Employment Outcomes of Recent Master's and Bachelor's Degree Recipients (August 1988)
Completions in Institutions of Higher Education, 1986-87 (December 1988)
Student Financing of Graduate and Professional Education: A Report of the 1987 National Postsecondary Student Aid Study (March 1989)
E.D. TABS: Student Education Expenses, 1987 (April 1989)
Profiles of Handicapped Students in Postsecondary Education, 1987 (June 1989)
Occupational and Educational Outcomes of 1985-86 Bachelor's Degree Recipients (August 1989)
Institutional Policies and Practices Regarding Faculty in Higher Education (January 1990)
A Descriptive Report of Academic Departments in Higher Education Institutions (January 1990)
Faculty in Higher Education Institutions, 1988 (March 1990)
E.D. TABS: Characteristics of Stafford Loan Recipients, 1988 (June 1990)
Trends in Racial/Ethnic Enrollment in Higher Education, Fall 1978 through Fall 1988 (June 1990)
New Teachers in the Job Market, 1988 Update (August 1990)
College Costs 1989-90: Basic Student Charges at 2-Year and 4-Year Institutions (August 1990)
Profile of Undergraduates in American Postsecondary Institutions (September 1990)
Undergraduate Financial Aid Awards: A Report of the 1987 National Postsecondary Aid Study (September 1990)
1989-90 Directory of Postsecondary Institutions, Volume 1 and 2 (September 1990)
National Estimates of Higher Education Statistics, Fall 1990 (December 1990)
The Relationship Between Postsecondary and High School Course-Taking Patterns: The Preparation of 1980 High School Sophomores Who Entered Postsecondary Institutions by 1984 (December 1990)
Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education, 1978-79 through 1988-89 (January 1991)
Early Estimates National Postsecondary Statistics, Collegiate and Non-Collegiate, Fall 1990 (March 1991)
E.D.TABS: National Postsecondary Aid Study: Preliminary Estimates on Student Financial Aid Recipients, 1989-90 (March 1991)
FRSS: College-Level Remedial Education in the Fall of 1989 (May 1991)
State Higher Education Profiles, 1989 (May 1991)
E.D. TABS: Enrollment in Higher Education (July 1991)
E.D. TABS: Salaries of Full-Time Instructional Faculty on 9- and 10-Month Contracts in Institutions of Higher Education, 1979-80 through 1989-90 (July 1991)

Data Files:

Residence of First-Time Students in Higher Education (April 1988)
National Postsecondary Student Aid Study, 1987 (June 1988)
Fall Staff in Postsecondary Institutions, 1987 (February 1990)
1988 National Survey of Postsecondary Faculty (March 1990)
Enrollment in Occupationally Specific Program, 1989 (December 1990)
Completions in Postsecondary Institutions, 1988-89" (December 1990)
Fall Enrollment in Postsecondary Institutions, 1989 (March 1991)
Faculty Salaries, Tenure, and Fringe Benefits in Postsecondary Institution for 1989-90 (March 1991)
Financial Statistics of Postsecondary Institutions, FY 1989 (May 1991)
Financial Statistics of Institutions of Higher Education, FY-1988 Imputed (June 1991)
Institutional Characteristics of Postsecondary Institutions, 1990- 91 (July 1991)

Postsecondary Education

Surveys	*Year of Data Collection*								
	1988	1989	1990	1991	1992	1993	1994	1995	1996
Integrated Post-Secondary Data System									
Institutional Characteristics	X	X	X	X	X	X	X	X	X
Fall Enrollments	X	X	X	X	X	X	X	X	X
Age Data		X		X		X		X	
Residence Data	X		X		X		X		X
Fall Enrollment in Occupationally Specific Programs		X		X		X		X	
Completions	X	X	X	X	X	X	X	X	X
Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty		X	X	X	X	X	X	X	X
Financial Statistics	X	X	X	X	X	X	X	X	X
College and University Libraries	X		X		X		X		X
NHES (Adult Component)				X			X		

	Year of Data Collection								
	1987	1988	1989	1990	1991	1992	1993	1994	1995
National Postsecondary Student Aid Study	X			X			X		
Recent College Graduates	X				X				
National Survey of Postsecondary Faculty		X					X		
Survey of Earned Doctorates in the United States	X	X	X	X	X	X	X	X	X

4

Educational Assessment

Assessing the educational outcomes of American students is a major concern of NCES. This is achieved primarily through the National Assessment of Educational Progress (NAEP). For two decades, NAEP has regularly collected and reported information on the knowledge, skills, and attitudes of a national sample of both age- and grade-representative populations in a variety of school subjects.

Insights into the educational practices and outcomes of the United States are also obtained by comparing them with other countries. This is achieved through the International Education Statistics program at NCES, which provides systematic statistical data on the educational experiences and trends in other countries. Information comparing the public expenditures for schooling, participation rates of school-age children, and education achievement levels of the various national populations are disseminated in the major reports of NCES.

Another way to study the outcomes of education is to investigate the course of studies that students have taken. Two NCES surveys have collected data on courses of study in high school: the 1982 High School and Beyond (HS&B) transcript study and the 1987 High School Transcript Study. A third transcript study is currently underway using 1990 NAEP 12th-grade students. While transcript studies are a relatively new program at NCES, the information gathered has proven quite useful and will be continued in the future.

NCES has begun a new program to assess educational outcomes among adults, through the National Adult Literacy Survey, now in its field test stage. In 1992 NCES will conduct a full-scale, household-based literacy survey of adults age 16 and over.

Data Uses:

NAEP data have been employed in numerous ways by researchers, educators, policymakers and the general public. Researchers have used NAEP data to: describe performance trends in all subject areas, especially basic skills; to study achievement in the arts; and to analyze instructional practices as well as a host of other research projects. In short, researchers in almost every field of education have studied the results, analyzed the trends, and derived possible hypotheses from the NAEP data. Researchers, however, are not the only individuals who use NAEP. Policymakers cite it to illustrate either the health or malaise of the American educational system. Educators have used the results to develop standards for improved mathematics and science curricula. Elected officials have used NAEP to call for educational reform.

NCES receives many requests for information on basic education issues in other countries such as school achievement levels, school completion rates, school expenditure levels, and higher education enrollment rates. Policymakers, such as State Education Chiefs, Governors, and local school officials, wish to identify the average level of achievement in other countries. Most of

these requests are for data concerning highly developed countries (e.g., Australia, Canada, England, France, Germany, and Japan).

High school transcript data have been used for a variety of purposes. In recent years, the educational reform movement has called for more rigorous programs of study in high school. In its 1983 *A Nation at Risk* report, the National Commission on Excellence in Education recommended a specific minimal course of study in high school. In response to this report, NCES analyzed the High School and Beyond (HS&B) transcript study, comparing the course-taking patterns of high school students graduating in 1982 to the curriculum recommended by the Commission. Another paper has related the course-taking patterns of students in 1982 to selected characteristics of their schools. More recently, the 1987 High School Transcript Study was used to compare the course-taking patterns of students in 1987 with similar patterns in 1982, and the National Assessment of Vocational Education (NAVE) conducted extensive analyses of vocational education enrollments and of course-taking patterns of handicapped high school students.

Surveys and Studies:

National Assessment of Educational Progress:

The National Assessment of Educational Progress (NAEP) was mandated by Congress (GEPA, Section 406) to continuously monitor the knowledge, skills, and performance of the nation's children and youth. Under this legislation, NAEP is required to provide objective data about student performance at national and regional levels.

In 1988, Congress amended this legislation to establish the National Assessment Governing Board (NAGB). The purpose of NAGB is to provide policy guidance for the execution of NAEP. The Board is composed of national and local elected officials, chief state school officers, classroom teachers, local school board members, and leaders of the business community, among others. Specifically, it has been charged by Congress with the following duties: selecting subject areas to be assessed; identifying appropriate achievement goals for each age group; developing assessment objectives; designing a methodology of assessment; and producing guidelines and standards for national, regional, and state comparisons.

Prior to 1990, NAEP was required to assess reading, mathematics and writing at least once every 5 years. The current legislation, requires assessments in reading and mathematics at least every 2 years, in science and writing at least every 4 years, and in history or geography and other subjects selected by the Board at least every 6 years.

DESIGN:

NAEP began to collect data in 1969 and has periodically conducted assessments of students aged 9, 13, and 17 and at various grade levels. In 1983, the grantee who conducted NAEP changed from the Education Commission of the States to Educational Testing Service. At the same time, a number of changes were made to the design to improve its utility to policymakers. The student samples were expanded to include both age- and grade-representative populations. The sample, since 1988, has been drawn from the universe of 4th, 8th, and 12th graders for the elementary and secondary school students survey; from the teachers of those students for the teacher survey; and from the school administrators at those elementary and secondary schools for the school characteristics and policy survey. A variation of matrix sampling (Balanced Incomplete Block Spiraling) was begun in packaging and administering assessment booklets. This method was used so that the results from a large number of items could be generalized to an entire population. Approximately 2,600 students respond to each block of items.

The subject areas assessed have included: reading, writing, mathematics, science, citizenship, U.S. history, geography, social studies, art, music, literature, and career and occupational development. From time to time, NAEP has conducted special assessments in other educational areas such as health, energy, consumer math, and young adult literacy. NAEP also

has collected background information from students, teachers, and administrators, and related these data to student achievement. Cognitive performance data and non-cognitive data are reported for the nation, and for various subgroups categorized by variables such as region, sex, and type and size of community. Also initiated in 1983 was the reporting of performance data by scaled proficiency levels (see "scale scores" below). In 1991, NAEP will begin the practice of reporting achievement levels, first in mathematics and then in other subjects as the levels are developed.

All questions undergo extensive reviews by subject-area and measurement specialists, as well as careful scrutiny to eliminate any potential bias or lack of sensitivity to particular groups. They are then field tested, revised, and administered to a stratified, multi-stage probability sample. The individuals sampled are selected so that their results may be generalized to the entire country. Once the data have been collected, scored, and analyzed, NAEP publishes and disseminates the results.

In recent years when reporting results, NAEP has utilized "scale scores." These scores are a device summarizing both the proficiency or level of understanding of a subject, and the nature of that understanding into a single number, reflecting a mean score, with corresponding standard deviation. For example, in mathematics, the levels of proficiency are described as follows: a) Level 150—simple arithmetic facts; b) Level 200—beginning skills and understanding; c) Level 250—basic operations and beginning problem solving; d) Level 300—moderately complex procedures and reasoning; e) Level 350—multi-step problem solving and algebra.

Over the past three assessment cycles NAEP has developed scales for mathematics, reading, writing, science, civics, history, and geography. These scales allow NAEP to report comparable results across ages and across assessments. In addition, the scale scores allow NAEP to report the proportion of students at different proficiency levels in the various subject areas. This permits educators, policymakers, and the general public to see the types of skills and knowledge American students demonstrate at different levels of proficiency in a subject area.

Currently, NAEP is conducted every other year in even-numbered years. In 1988, NAEP assessed student performance in reading, writing, civics, geography, and U.S. history; and in 1990, reading, writing, science, and mathematics were assessed. NAEP has been designed to produce a representative sample at the national level. In the 1990 assessment, data were collected from a national probability sample of over 45,000 students per age/grade or a total of about 146,000 students in nearly 2,100 schools, as well as their principals and a sample of their teachers. Representative state-level data were produced for the first time for participating states from the trial state assessment in 1990 for mathematics at the 8th-grade level.

COMPONENTS:

Elementary and Secondary School Students Survey:

Areas assessed have included: reading; writing; mathematics; science; civics; U.S. history; music; geography; social studies; art; literature; computer competence; and career and occupational development. NAEP also has conducted special assessments in other educational areas such as health, energy, consumer math, and young adult literacy.

School Characteristics and Policy Survey:

Data collected about the school have included: enrollment; curriculum testing and objective setting-practices; school administrative practices; school conditions and facilities; special services and programs. Data collected about the school administrator include: race/ethnicity; sex; undergraduate field of study; years as principal; total school administrative experience; teaching experience.

Teacher Survey:

Data collected about the teacher have included: classroom instructional practices; race/ethnicity; sex; age; undergraduate field of study; teaching certification; full-time teaching experience; employment status; and subject matter specialization.

POLICY AND RESEARCH ISSUES:

As noted in the "Data Uses" section of this chapter, the number of studies produced by researchers using the NAEP results is extensive. A study group of policymakers was formed by the Secretary of Education in 1986 to examine NAEP. The results of this study group was the

publication, *The Nation's Report Card.* It stated that policymakers are keenly interested in NAEP student assessment data because they address the outcomes of education; specifically, the level of educational achievement. It emphasized, however, that NAEP should produce data which are representative not only at the national level, but also at the state level. New legislation enabled NAEP to begin pilot testing assessments at the state level during 1990. Such state-level results promise to make NAEP more useful for policymakers and the public. (See the "Plans" section of this chapter for a further explanation.)

In addition to performance results in subject areas, NAEP collects basic descriptive information about students, teachers, administrators, schools, and communities. This information can be used to address the following four educational policy issues that are of concern to educators, policymakers, and researchers: a) Instructional practice—What instructional methods are being used and how do these relate to achievement? b) Students-at-risk—How many students appear to be at-risk, and what are their characteristics? c) Teacher work force—What are the characteristics of teachers of various subjects? d) Education reform—What, if any, policy changes are being made by our nation's schools?

Over the past 20 years, NAEP has generated more than 200 reports spanning 11 instructional areas. It is the nation's only ongoing, comparable, and representative assessment of what American students know and can do. A summary of NAEP findings since its inception is available in the publication, *Accelerating Academic Achievement*, released in September 1990.

For further information on the National Assessment of Educational Progress contact:

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International Education Statistics:

NCES participates in international statistical studies of education to provide the public with reliable information on comparisons of the United States with other countries on such topics as student achievement, school participation rates, curriculum and instruction, teacher characteristics, and student attitudes and activities. Through comparisons with other countries, it is possible to learn more about the status of education in the United States and to generate new ideas which help policymakers improve American education.

The NCES program for international statistics includes activities to improve the quality and comparability of international statistics related to education. NCES participates in cooperative international efforts to develop, conduct, and analyze comparative studies in education, particularly in countries with comparable levels of educational development. In addition, NCES supplies international organizations such as UNESCO and the Organization for Economic Cooperation and Development (OECD) with statistics on the United States education system.

DESIGN:

Unlike the statistics for population, labor, and health, there are few readily available sources of international statistics about education. No single national or international organization collects statistics on international education comparisons of system organization, school characteristics, student participation, educational attainment, school finance, teacher characteristics, and student achievement. NCES plays a central role in coordinating organizations making cross-national comparisons and has devoted staff and funds for conducting international education studies.

NCES also supports a grant to the National Academy of Sciences for the U.S. Board on International Comparative Studies in Education. This is a national board of eminent scholars who have been selected to discuss U.S. participation in international studies. The purpose of this committee is to provide advice on measures that can be taken to improve future international studies on education.

NCES also cooperates with the Organization for Economic Cooperation and Development (OECD) to develop an international education indicators system for comparing countries on measures of student outcomes, attitudes, enrollment, school characteristics, and school finance.

Currently, there are a number of major NCES projects focusing on international education. NCES has participated in funding analyses of several past international assessments conducted by the International Association for Evaluation of Educational Achievement (IEA) and has sponsored two International Assessments of Educational Progress (IAEP). NCES contributes to the coordination of the international research efforts and supervises the data collection in the U.S. Recent studies are described below. Characteristics of each study may vary somewhat from country to country.

COMPONENTS:

International Assessment of Education Progress (IAEP)

Participants: 5 countries and 6 Canadian provinces in 1988. Target population: students born in 1974 (ages 13 years one month to 14 years one month). Sample size: about 100 schools from each country or province and 20 students per school. Content: math (numbers and operations, relations and functions, geometry, measurement, data organization, logic and problem solving). Science (life science, physics, chemistry, earth and space science, nature of science); and student attitudes.

Second International Assessment of Education Progress (IAEP-2):

Participants: 20 countries in 1991. Target population: students at age 13 (and age 9 in some countries). Sample size: about 3,300 students per country. Content: achievement in science and mathematics and a special geography probe.

IEA Reading Literacy Study:

Participants: 34 countries or areas within countries in 1990-91. Target populations: A) students at age 9; B) students at age 14. Sample size: varies by country. In the U.S., approximately 10,000 9-year-olds and 5,000 14-year-olds. Content: frequency of reading; school, teacher, and social factors influencing reading levels; literacy levels reached by students.

IEA Third International Mathematics and Science Study

Planned for 1993-94 and 1997-98. See Plans for Educational Assessment section for additional details.

POLICY AND RESEARCH ISSUES:

International data sets are used primarily to analyze the performance and experiences of American students in a variety of subject-areas related to their counterparts in other countries. Policymakers, researchers, and educators can use these data to analyze relative strengths and weaknesses of American students and schools to generate new ideas for policies to improve American education. Past assessments have emphasized the fields of mathematics and science. In coming years, data are expected to be reported on reading, literacy, computers, and preprimary education, as well as math and science.

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High School Transcript Studies:

Three high school transcript studies have been conducted since 1980. The first was part of the High School and Beyond (HS&B) first followup survey in 1982 (see Chapter 5 for further information on HS&B). About 12,000 transcripts were collected from school records for HS&B sophomore cohort students who were seniors in 1982. In 1983, the National Commission on Excellence in Education prepared a report, *A Nation At Risk*, recommending a specific minimal course of study in high school. In 1988, the Education Department evaluated the way the nation responded to the call for school reform. In its report, *American Education: Making It Work*, the authors compared the recommended curriculum with the actual course-taking patterns of 12th-grade students. The data came from the 1987 High School Transcript Study which consisted of approximately 22,700 seniors who had participated (as 11th graders) in the 1986 National Assessment of Educational Progress (NAEP). The 1990 High School Transcript Study, done in conjunction with NAEP, will continue to track changes in the curricular patterns of high school students.

To ensure maximum compatibility, the procedures and formats used in previous studies for editing, coding, error resolution, and documentation were also used for the 1990 transcript data. This will enable users to compare cohorts with a minimum of effort. Updates for 1990 will incorporate changes necessary to reflect modifications in course offerings over the last 3 years.

DESIGN:

The 1990 NAEP High School Transcript Study consisted of systematically transcribing about 25,000 transcript records to determine the course-taking patterns of 12th-grade high school students selected from the 1990 NAEP assessment sample. All transcript information was collected by field personnel; no personal contacts were made with students.

For the 1990 study, the following three summary tables were developed: 1) the percentage of high school graduates earning minimum credits in new basics courses in 1990 and the comparison of the totals to 1982 and 1987; 2) the mean number of credits (Carnegie units) that graduates earned in each major subject field in 1990; and 3) the number of students receiving credit in 1990 in secondary subjects for courses in the NCES' Classification of Secondary School Courses (CSSC).

The coded data were compatible with the data produced in the 1982 HS&B Transcript Study and the 1987 High School Transcript Study. This standardization and comparability will be useful in later analyses comparing the results of the three studies. It also has the cost advantage of avoiding unnecessary duplication of design work that has already been performed.

COMPONENTS:

The 1990 NAEP High School Transcript Study

Student characteristics: dates attended and left school, graduate or not when leaving school, high school programs in which enrolled, completion status of curricular programs (particularly vocational programs), days absent, honors awarded, disciplinary actions recorded, grade point average, standardized test scores, and student rank in relation to class size.

Course level characteristics: subject matter of the course; period of time the course was taken; grade earned; credits earned; whether the course was taken at an Area Vocational Technical Center; and whether the course was designed for honors, exceptional, or special education students.

POLICY AND RESEARCH ISSUES:

High school transcript data inform researchers and policymakers about the course-taking patterns of students. Since the report, *A Nation At Risk*, there have been a number of other critics advocating the strengthening of the high school core curriculum. Students have been encouraged to increase their academic load with courses in English, mathematics, science, social studies, computers, and foreign languages. As NCES conducts more transcript studies, overall trends in course-taking patterns can be traced. Transcript data are measures of exposure, rather than measures of learning. More research is needed to determine what effect this content exposure has on student achievement.

For more information on the high school transcript studies, contact:

1982 Study:
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(202) 219-1914

1987 Study:
Andrew Kolstad
Education Assessment Division
(202) 219-1773

1991 Study:
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Education Assessment Division
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National Adult Literacy Survey

Literacy assessments inform policymakers about the extent of basic skills in using printed information that the adult population needs to function in society, to achieve one's goals, and to develop one's knowledge and potential. Recently, concern has mounted that inadequacies in the literacy of American workers are reducing the competitiveness of the American economy and preventing some Americans from exercising the rights and responsibilities of citizenship. The National Adult Literacy Survey will provide an accurate benchmark for measuring the literacy capabilities of adults.

DESIGN:

The 1992 National Adult Literacy Survey defines literacy as "using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential." Literacy will be measured along three dimensions: 1) prose literacy—the ability to understand and use information from connected texts that include editorials, news stories, poems, and the like; 2) document literacy—the ability to locate and use information contained in documents, such as job applications or payroll forms, bus schedules, maps, tables, indexes, and so forth; 3) quantitative literacy—the ability to apply arithmetic operations to numbers embedded in printed materials, such as balancing a checkbook, figuring a tip, completing an order form, or determining the amount of interest from a loan advertisement.

Because policymakers need to assess a broad range of abilities in the population, but do not need to diagnose literacy problems of individuals, the 1992 assessment has been designed to cover a broad range of skills. It would take any one individual about 4 hours to complete the entire assessment. To keep the burden on any one individual to less than an hour, the assessment was cut into 13 pieces, with only 3 pieces given to each respondent. The design used Balanced Incomplete Block Spiraling, as in NAEP, to assign systematically the parts of the assessment to individuals in a way that maximized the information yield and permitted generalizing the sample results to the U.S. population. The responses to the items are pooled and reported by scaled proficiency levels on the three dimensions of literacy. All questions underwent extensive review by subject area and measurement specialists, as well as scrutiny to eliminate any bias or lack of sensitivity to particular groups.

The National Adult Literacy Survey will be administered in person by trained interviewers to a nationally representative probability sample of about 15,000 individuals ages 16 and over. The sampling procedures, questionnaires, and new test items were field tested on a sample of 2,000 people in 16 communities in 1991, and will be revised and administered to the full sample in 100 communities all over the United States in 1992. Once the data have been scored and analyzed, the results will be published and the data made available to the public.

This is the first national study of literacy for all adults since the Adult Performance Level surveys of the early 1970s. The authorizing legislation (The Adult Education Amendments of 1988) calls for NCES to report on literacy every 4 years.

COMPONENTS:

National Adult Literacy Survey:

Areas to be assessed include: prose literacy; document literacy; and quantitative literacy. Other information includes race/ethnicity; age; sex; educational and occupational background; and reading habits.

POLICY AND RESEARCH ISSUES:

There has been a recent wave of concern about the literacy level of the American work force, as described in a number of national reports published since 1980, including *A Nation At Risk, Toward a More Perfect Union, The Subtle Danger, Work Force 2000, The Bottom Line,* and *Literacy: Profiles of America's Young Adults.* These reports have emphasized the need to increase our nation's standard of literacy in order to maintain our standard of living and to compete in global markets. This concern about literacy culminated in 1990, when President Bush and the governors adopted six national education goals, including: "By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." National programs to improve adult skills need to be based on knowledge about the nature and severity of the deficits in literacy. The role of the National Adult Literacy Survey is to provide the elementary facts needed to begin understanding our nation's literacy problem.

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Plans for Educational Assessment:

NAEP has been evaluating the national performance of students on achievement tests in specific subject areas since 1969. However, since the curricula are changing, NAEP must also change. NAEP is currently using a national consensus process to develop test and item specifications for reading in 1992. This consensus process was also used to develop the 1990 mathematics assessment. NAEP is also incorporating new assessment techniques. In 1990, about 2.5 million open-ended items were scored in connection with the mathematics assessment. In addition, the 1992 writing assessment, an assessment consisting totally of open-ended items, will be scored with primary trait, holistic, and writing mechanics scoring procedures. Other new assessment techniques include the use of calculators in the 1990 mathematics assessment, and a special study on the use of timed mathematics items to measure students' ability to estimate the correct answer.

NAEP is a national assessment program; however, it has been expanded to include a voluntary trial state assessment program. The first state-level assessment collected data in 1990 from 37 participating states, two territories and the District of Columbia. In 1992, NAEP will conduct a trial state mathematics assessment for the 4th and 8th grades, as well as a trial state reading assessment for the 4th grade. Depending on the outcomes of these trial state assessments, Congress may authorize future NAEP studies at the state level. Throughout, NCES will provide continuing reviews of NAEP through an independent evaluation of the trial state assessments, a NAEP technical review panel, and validation studies. Additionally, NCES will solicit public comment on the conduct and usefulness of NAEP by holding open meetings across the country.

Plans for international education studies include the Third International Mathematics and Science Study (TIMSS) sponsored by IEA. Approximately 35 countries, including the United States, are planning to participate in 1993-94. A second phase of the study is planned for 1997-98. TIMSS will not only measure students' achievement in math and science, but will also investigate differences in curriculum and instruction, and include alternative assessment options. The aim of TIMSS is to gain a better understanding of the relationships among context, curriculum, instructional practices and achievement. The target populations are students at age 9 and 13 and students in the last year of secondary education plus a subgroup of these students who are taking specialized courses in math and science.

Selected Publications and Data Files:

National Assessment of Educational Progress:

Computer Competence: The First National Assessment (April 1988)
The Mathematics Report Card: Are We Measuring Up? Trends and Achievement Based on the 1986 National Assessment (June 1988)
National Assessment of Educational Progress 1983-87: A Bibliography of Documents in the ERIC Database (September 1988)
The Science Report Card: Elements of Risk and Recovery. Trends and Achievement Based on the 1986 Assessment (September 1988)
School Climate and Reading Performance (October 1988)
Mathematics Objectives: 1990 Assessment (February 1989)
Crossroads in American Education: Overview of Math, Science, Reading, and Writing, 1986 Assessment (February 1989)
The Reading Report Card, 1971-1988 (January 1990)
The Writing Report Card, 1984-1988 (January 1990)
America's Challenge: Accelerating Academic Achievement, A Summary of Findings from 20 Years of NAEP (September 1990)
The Civics Report Card (1990)
The U.S. History Report Card (1990)
Geography Learning of High School Seniors (1990)
Learning to Read in our Nation's Schools (1990)
Learning to Write in our Nation's Schools (1990)
The State of Mathematics Achievement, NAEP's 1990 Assessment of the Nation and the Trial Assessment of the States (June 1991)
The State of Mathematics Achievement, Executive Summary, NAEP's 1990 Trial State Assessment of the Nation and the Trial Assessment of the States (June 1991)
Individual Reports on Each of the 40 States and Jurisdictions Participating in the 1990 NAEP Trial State Assessment (June 1991)
The Technical Report of NAEP's 1990 Trial State Assessment (June 1991)

NAEP Data Files:

Public use data files are available for each assessment in NAEP.

International Education:

The Underachieving Curriculum: Assessing U.S. School Mathematics From an International Perspective (January 1987)
International Comparisons of Teacher Salaries: An Exploratory Study (July 1988)
International Conference on Cross-National Education Indicators (August 1988)
A World of Differences: An International Assessment of Mathematics and Science (January 1989)
Twenty-Five Years of International Achievement Surveys: A Summary of Test Results and Considerations for Planning Future Research (Forthcoming)

High School Transcript Studies:

How Well Do High School Graduates of Today Meet the Curriculum Standards of the National Commission on Educational Excellence? (September 1983)
An Analysis of Course Offerings and Enrollments as Related to School Characteristics (April 1984)
American Education: Making It Work (May 1988)
What Americans Study (Published by ETS) (1989)
Participation in Secondary Vocational Education (Forthcoming)

Educational Assessment

Surveys	*Year of Data Collection*					
	1988	1990	1992	1994	1996	1998
National Assessment of Educational Progress						
Reading	X	X	X	X	X	X
Mathematics	X	X	X	X	X	X
Science		X		X		X
Writing	X		X		X	
History/Geography	X			X		
Civics	X					
National Adult Literacy Survey			X		X	
High School Transcript Studies	*Senior Class of*		1982	1987	1990	
			X	X	X	

5

National Longitudinal Studies

The National Longitudinal Studies program at NCES was established to provide ongoing, descriptive information about what is occurring at the various levels of education and the major transition phases of students' lives. In this way, intervening processes can be studied. To do this requires the periodic examination of educational and occupational attainment, aspirations, attitudes, and motivations during the pivotal years before, during, and after high school and college. With extensive questioning over succeeding years, longitudinal studies have made long-range comparisons between what individuals expect and what actually occurs. Consequently, such studies are critical to understanding the processes by which education leads individuals to develop their abilities and their roles in society.

The National Longitudinal Study of 1972 began with that year's high school senior class and followed them through 1986. Three other longitudinal studies are being conducted currently. The High School and Beyond study began with both the sophomore and senior classes of 1980. The National Education Longitudinal Study of 1988 began with the 8th-grade class of 1988. The Beginning Postsecondary Students longitudinal survey started with postsecondary students who began their postsecondary education in 1989-1990. Two new longitudinal studies are currently being designed. See the Plans section of this chapter for a description of the Baccalaureate and Beyond Study and the Early Childhood Longitudinal Study.

Data Uses:

The National Longitudinal Study of 1972 (NLS-72) data have been widely used for investigating educational policy issues. For example, in the early 1980s, a congressional agency turned to these data to develop a model for estimating the costs of tuition tax credits. More recently, capsule descriptions of this cohort have been produced and attrition rates from college have been studied, as have transitions from high school and college into the work place. Postsecondary attainment, access, and financial aid studies have all used NLS-72. A recent article in a major newspaper noted that the findings of the NLS-72 studies have produced data which yield significant insights into contemporary America.

The enlarged scope of High School and Beyond (HS&B) has provided even more data than NLS-72 for examining a wide variety of education policy issues. Like NLS-72, HS&B has produced a number of capsule descriptions of high school students. Additionally, HS&B data have been used to study the achievement of Hispanic students, discipline and order in the high schools, economic issues such as students working while in school, comparisons of public and private schools, and coursework patterns of American high school students. They also make it possible to compare the students of 1980 with those of 1972. The National Assessment of

Vocational Education (NAVE) utilized the findings from the HS&B study in a number of their reports. For example, NAVE used HS&B data for studies which attempted to measure high school curricular experiences as they relate to vocational education; course enrollment patterns; and student financial aid as it relates to postsecondary vocational education.

The National Education Longitudinal Study of 1988 has recently completed the first followup data collection. Data from this survey are being used to study transition patterns of 8th grade students as they move through school (e.g., moving from public to private school and dropping out of school).

Surveys and Studies:

The National Longitudinal Study of 1972:

Young people's success in making the transition from high school or college to the work force varies enormously for reasons only partially understood. Some cling to dependency; others move into self-determination smoothly. The National Longitudinal Study of 1972 (NLS-72) base year study together with the five followup surveys attempted to discover how these transitions evolve.

DESIGN:

NLS-72 was constructed to produce representative data at the national level on the cohort of students who were in the 12th grade in 1972. The sample for the base year NLS-72 was a stratified, two-stage probability sample of students from all schools, public and private, in the 50 states and the District of Columbia with a 12th-grade enrollment during the 1971-72 school year. A sample of schools was selected in the first stage. In the second stage, a random sample of 18 high school seniors was selected within each participating school.

Data were collected by mail, telephone, and personal interviews. In addition, the survey obtained school transcript data on high school curriculum, credit hours in major courses, grade point average, standardized test scores, and related information for each senior. To conduct intensive studies of disadvantaged students, NCES oversampled schools in low income areas and schools with significant minority enrollments.

The size of the student sample was increased during the first followup survey because base year nonrespondents were recontacted at that time. Those who provided base year information were retained and included in later followup efforts. Consequently, in 1972 there were 16,683 respondents, but in the first followup in 1973 the number jumped to 21,350. The number of respondents in subsequent followups in 1974, 1976, 1979, and 1986 were 20,872; 21,807; 18,630; and 12,841 respectively (only a subsample of the original sample was contacted in 1986).

In addition to the followups, a number of supplemental data collection efforts were undertaken. For example, a Postsecondary Education Transcript Study was undertaken in 1984, and the fifth followup survey in 1986 included a teaching supplement.

COMPONENTS:

Base Year Survey:

Age; sex; racial/ethnic background; physical handicap; socioeconomic status of family and community; school characteristics; future education and work plans; test scores; school experience; school performance; work status; work performance and satisfaction.

Followup Surveys (1973, 1974, 1976, 1979, and 1986):

Age; sex; marital status; community characteristics; education and work plans; educational attainment; work history; attitudes and opinions; postsecondary school characteristics; grade average; credits earned; financial assistance for postsecondary education.

POLICY AND RESEARCH ISSUES:

NLS-72 can provide information about quality, equity and diversity of educational opportunity; the effect of those factors on cognitive growth, individual development and educational outcomes; changes over time in educational and career outcomes; and other transitions over time. The NLS-72 data cover the sampled cohort from 1972-86.

For further information on the National Longitudinal Study of 1972 contact:

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High School and Beyond:

New education issues arose after NCES began its longitudinal study of the 1972 senior class. Declining test scores and minimum competency testing, for example, caused concern among parents and educators alike. So did the rate at which many students dropped out of high school before graduation. Increased opportunities in secondary school vocational education opened new vistas for youths attentive to their futures. And, anxiety over access to postsecondary and vocational education brought sharper focus on the education experiences of Hispanic and other minority youths.

To examine these and other issues, NCES initiated a second longitudinal study, High School and Beyond (HS&B), to complement the first. HS&B studied the high school students of 1980. It attempted to collect the same types of data gathered in the National Longitudinal Study of 1972. However, the second study differed from the first in two significant ways. First, it addressed many newer elements of the educational process. And second, it included a sophomore cohort as well as a senior cohort. Adding the sophomore cohort made it possible to address the issue of high school dropouts, and to study changes and processes during high school.

DESIGN:

The study design provided for a highly stratified national probability sample of over 1,100 secondary schools as the first stage units of selection. Certain types of schools were oversampled to make the study more useful for policy analyses: public schools with a high percentage of Hispanic students; Catholic schools with a high percentage of minority group students; alternative public schools; and private schools with high achieving students. The initial national sample for High School and Beyond was considerably larger than that employed in NLS-72. In this stage, 36 seniors and 36 sophomores were selected in each school. Parents of these students were also sampled. In schools with fewer than 36 students in either of these groups, all eligible students were selected. The base year of this survey, which was conducted early in 1980, collected data from over 30,000 seniors and 28,000 sophomores.

The longitudinal design of the study called for followup surveys of substantial subsets of the two cohorts at 2-year intervals. Data collection for the first followup began in spring 1982. Subsequent followups were also undertaken in 1984 and 1986, and another followup is planned for 1992. The first followup survey conducted in 1982 sampled almost 40,000 students (12,000 seniors and 27,000 sophomores), the second in 1984 approximately 27,000 students (12,000 seniors and 15,000 sophomores), and the third in 1986 almost 27,000 students (also 12,000 seniors and 15,000 sophomores). The 1992 followup will collect data from 15,000 sophomores.

Data collection instruments in the base-year survey included: 1) sophomore and senior student questionnaires with a series of cognitive tests, 2) school questionnaires filled out by an official in each participating school, 3) teacher comment checklists filled out by a teacher of the sampled student, 4) second language questionnaires, and 5) parent questionnaires filled out by a sample of parents from both cohorts. The student questionnaires focused on individual and family background, high school experiences, work experiences and future plans. Cognitive tests

administered to students measured both verbal and quantitative abilities. Sophomore tests included brief achievement measures in science, writing, and civics while seniors were asked to respond to tests measuring abstract and nonverbal abilities. The parent questionnaire elicited information about how family attitudes and financial planning affect educational goals. The school questionnaire gathered information about enrollment, staff, educational programs, facilities and services, dropout rates, and special programs for handicapped and disadvantaged students. The teacher comment checklist provided teacher observations on students participating in the survey.

The first followup of sophomores provided insight into the school dropout problem and into the influence of the last two years of high school on student attitudes and aspirations. The second followup in 1984 included a Postsecondary Education Transcript Study. The later followups made it possible to trace the consequences of dropping out, and the extent to which dropouts later return and complete high school. In brief, HS&B provides information on the educational, vocational, and personal development of young people as they move from high school into postsecondary education or the work force, and then adult life. The initial study (NLS-72) laid the groundwork for comparison with HS&B. It recorded the economic and social conditions surrounding high school seniors in that year and, within that context, their hopes and plans. It has since measured the outcomes while also observing the intervening processes. High School and Beyond allows researchers to monitor changes by retaining the same goals, measuring the economic returns of postsecondary education for minorities, delineating the need for financial aid, etc. By comparing the results of the two studies, researchers can determine how hopes, plans, and outcomes differ in response to changing conditions or remain the same despite such changes.

Additional concerns of HS&B encompass issues that have surfaced since NLS-72 began: How did the availability (or lack thereof) of student financial aid alter student plans for further education? Have middle-income families altered their attitude toward postsecondary education? What will be the effect of changes in federal student financial aid? These questions, as well as concerns about declining test scores, youth employment, and bilingual education are addressed, along with a host of others.

COMPONENTS:

Student Questionnaires:

Age; sex; racial/ethnic background; religion; socioeconomic status of family and community; school experiences; test scores; school performance; future educational plans; family status and orientations; work experience and satisfaction; future occupational goals; plans for and ability to finance postsecondary education; and cognitive tests.

School Questionnaire:

Enrollment; staff; educational programs; facilities and services; dropout rates; and special programs for handicapped and disadvantaged students.

Teacher Comment Checklist:

Teacher observations about the student.

Parent Questionnaire:

Family attitudes; family income; employment, occupation; salary; financial planning; and how these affect postsecondary education and goals.

Followup surveys (1982, 1984, 1986, 1992):

Sophomores: similar information as collected in the base year survey plus high school transcripts and data on dropping out. Seniors: age; sex; marital status; community characteristics; work plans; educational attainment; work history; attitudes and opinions; postsecondary school and program characteristics; postsecondary transcripts and credits earned; type of financial aid for postsecondary education.

POLICY AND RESEARCH ISSUES:

The base year survey of HS&B and the followup surveys have addressed the issues of educational attainment, employment, family formation, personal values, and community activities since 1980. For example, a recent major study on high school dropouts used HS&B data to demonstrate that a large number of dropouts return to school and earn a high school diploma or an equivalent certificate. Other examples of issues and questions that can be addressed with

HS&B data are: a) How, when and why do students enroll in postsecondary education institutions? b) Did those who (while in high school) expected to complete the baccalaureate (BA) degree actually do so? c) How has the percentage of recent graduates from a given cohort who enter the work force in their field changed over the past years? d) What are the long-term effects of not completing high school in the traditional way? How do employment and earning event histories of traditional high school graduates differ from those who did not finish high school in the traditional manner? e) Do individuals who attend college earn more than those individuals who do not attend college? What is the effect of student financial aid? f) What percentage of college graduates are eligible or qualified to enter a public service profession such as teaching? g) How many enter the work force full-time in the area for which they are qualified? h) How and in what ways do public and private schools differ?

For more information on High School and Beyond contact:

Aurora D'Amico
Postsecondary Education Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5652
Telephone number (202) 219-1365

National Education Longitudinal Study of 1988:

The National Education Longitudinal Study of 1988 (NELS:88) is the third major longitudinal study sponsored by the NCES. The two studies that preceded NELS:88 (the National Longitudinal Study of 1972/NLS-72 and High School and Beyond/HS&B) surveyed high school seniors (and sophomores in HS&B) through high school, postsecondary education, and work and family formation experiences. Taken together, the longitudinal studies provide not only measures of educational attainment, but also rich resources in determining the reasons for and consequences of academic success and failure. NELS:88 seeks to expand on this base of knowledge by following children starting at an earlier age (8th grade) and by updating information throughout the 1990s.

DESIGN:

The base year sample, selected in 1988, was constructed to be representative at the national level. Two-stage probability sampling was used to select schools and students. The first stage involved stratified sampling of some 1,000 public and private schools from a universe of approximately 40,000 schools containing 8th-grade students. The second stage included random samples of approximately 24-26 students per school. Some 25,000 8th graders and their parents, their teachers, and their school principals were surveyed. When the student sample was selected, one parent, one school principal, and two teachers of each student were also selected as subsamples. Hispanic- and Asian-American students were oversampled to permit analysis of the performance of language-minority students.

NELS:88 is designed to provide trend data about critical transitions experienced by young people as they develop, attend school, and embark on their careers. It will complement and strengthen state and local efforts by furnishing new information on how school policies, teacher practices, and family involvement affect student educational outcomes (i.e., academic achievement, persistence in school, and participation in postsecondary education). In the base year, NELS:88 included four cognitive tests in the student questionnaire, a parent questionnaire, a teacher questionnaire, and a school administrator questionnaire.

The design for the NELS:88 First Followup Survey included student, school administrator, teacher, and dropout questionnaires. Students took cognitive tests in reading, science, social science, and math. The tests were designed to reflect 10th-grade coursework, but also have enough overlapping items with the 8th- and 12th-grade tests to permit measurement of academic growth. Selected teachers of each sampled student provided information about the student's study habits and performance and about instructional practices in the student's classes. The NELS:88 First Followup was conducted between February and May of 1990.

In 1992, NCES plans to survey this 8th-grade cohort (as seniors) again. This Second Followup Survey will include student, school administrator, parent, teacher and dropout questionnaires. Students and dropouts will take cognitive tests in reading, science, social sciences, and math.

COMPONENTS:

Base Year (1988)

Student Questionnaire:

Family background items; values and interaction with parents regarding in- and out-of-school activity; educational and occupational goals; perceptions about self and school; participation in classes and activities; and self-reported grades. Four cognitive tests: reading, math, science, and history/government.

Parent Questionnaire:

Socio-demographic characteristics; participation in student course selection; long-range educational planning; in- and out-of-school activities; establishing home discipline and interaction with the school; family educational expenses; and sources of income for children's education.

School Administrator Questionnaire:

School characteristics: grade span; school type; enrollment and major program orientation; policies and practices; admission procedures and tuition; grading; testing and minimum course credits; gifted and talented programs; activities; and school climate.
Student characteristics: average daily attendance; migration; race/ethnicity; single parent households; limited English proficiency classes; and special student services such as remedial classes and job-training.
Teaching staff characteristics: size; race/ethnicity; salary; degree; and percentage of language assistance classes.

Teacher Questionnaire:

Teacher characteristics: sex; race/ethnicity; age; experience; certification; degree; foreign language proficiency; in-service education; classroom preparation; parent contact; perception of school climate; and experience teaching gifted and talented children. Teacher perceptions of the student's: personal characteristics; behavior; academic performance; attitudes; problems and handicaps. Teacher descriptions of: homework assigned; use of instructional materials; choice of textbook/workbook; curriculum; and topical coverage.

First Followup (1990)

Student Questionnaire:

School experiences and activities; plans for the future; language use; opinions about self; attitudes; religion; finances; family composition. Four cognitive tests: reading, math, science and history/government.

Dropout Questionnaire:

Same as Student Questionnaire except school experiences and activities section asks reasons for leaving school, grade at the time, and if the student returned to school.

Teacher Questionnaire:

Student information: academic performance; behavior; homework; absenteeism; parental involvement; language minority status. Class information: enrollment; composition; homework assigned; class schedule; teaching materials, methods, and objectives. Teacher information: sex; race/ethnicity; subjects taught; and degrees held. School climate information: cooperation among staff; shared beliefs; and problems.

School Questionnaire:

School characteristics: grade span; enrollment; control of school; community location; calendar system; programs, facilities, and services; absenteeism. Student characteristics: race/ethnicity; single parent homes; limited English proficiency; free lunch programs; busing; 10th-grade dropouts. Teaching staff characteristics: meetings; departmentalization; chairpersons; full-time teachers; salaries; race/ethnicity; degrees. School admission policies and practices: grading and/or testing structure; school programs; school climate.

POLICY AND RESEARCH ISSUES:

The longitudinal design of this study permits the examination of change in young people's lives and the role of school in promoting growth and positive life outcomes. For example, NELS:88 data can be used to investigate:

The transition from elementary to secondary school. The survey will permit the investigation of ways students are assigned to curricular programs and courses, and how such assignments affect their academic performance as well as future career and postsecondary education choices.

The students' academic growth over time. Family, community, school, and classroom factors that promote such growth can be studied. The goal is to identify school and classroom characteristics and practices that promote student learning. The effects of changing composition of the family, which is evidenced by increasing numbers of working mothers and families headed by single parents, also can be studied.

The features of effective schools. By surveying students, teachers, and school administrators, NELS:88 will enable an assessment of student educational outcomes. It will be possible to identify those school attributes that are associated with student academic achievement and other selected student behaviors.

The process of dropping out of school, as it occurs from 8th grade on. NELS:88 provides the unprecedented opportunity to study young dropouts on a national scale; to examine the contextual factors associated with dropping out, especially those related to the school; and to profile the movement of students in and out of school, including alternative high school programs.

The role of the school in helping the disadvantaged. Given the factors of increasing teenage pregnancy rates, increasing poverty among children, and the growing proportion

of language-minority students, there is a need for research on the school experiences of the disadvantaged and the approaches that hold the greatest promise for assisting them. By design, the NELS:88 sample contains ample disadvantaged students to study this issue.

The school experiences and academic performance of language-minority students. NELS:88 has oversampled Hispanics and Asians/Pacific Islanders to allow meaningful analyses of these subpopulations. Specifically, the data will provide information on variation in achievement levels, and bilingual education needs and experiences.

Attracting students to the study of mathematics and science. The data will show the math and science preparation students receive nationwide and the degree to which their interest in these subjects is captured. Information will also be available on whether they are encouraged by their teachers and school to study advanced mathematics and science.

Further information on the National Education Longitudinal Study of 1988 may be obtained from:

Jeffrey A. Owings
Elementary and Secondary Education
Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1777

Beginning Postsecondary Student Longitudinal Study:

To complement the high school cohort longitudinal studies and to improve data on participants in postsecondary education, the Beginning Postsecondary Student Longitudinal Study (BPS) has been started. Because older students are increasingly included in postsecondary education as well as recent high school graduates, high school cohort studies are not representative of all postsecondary participants at a given point in time. BPS includes these "non-traditional" as well as "traditional" students and is representative of *all* beginning students in postsecondary education (PSE).

The BPS survey will enhance and expand the base of information available regarding persistence, progress, and attainment from initial time of entry into postsecondary education through leaving and entering the work force. By starting with a cohort which has already entered postsecondary education, BPS is able to address issues of persistence, progress, and attainment, as well as issues related to transitions between undergraduate and graduate education and transitions between PSE and work. By following a PSE cohort (rather than a single age elementary or seconday school cohort), BPS will be able to determine to what extent, if any, students who start PSE later differ in their progress, persistence, and attainment. Because students who delay entry into PSE have different experiences prior to entry than students who enter immediately after high school, their transitions between levels of education and work may also be different. BPS will follow first-time beginning students for at least 6 years at 2-year intervals to allow adequate time for completion and transition.

DESIGN:

The BPS is based on the National Postsecondary Student Aid Study (NPSAS). NPSAS is a large, nationally representative sample of institutions, students, and parents (see NPSAS description in Chapter 3 for further information). As such, it provides a highly efficient and cost-effective way of identifying a nationally representative sample of beginning students in PSE. In addition, data from all components of NPSAS (the Student Record Abstract, the Student Interview, and the Parent Survey) are available as base year data for the BPS sample.

BPS will follow NPSAS beginning students at 2-year intervals beginning with NPSAS:90. About 12,000 students who began their PSE career in the 1989-90 academic year responded to NPSAS:90 and will be included in the first BPS (BPS:90/92) in the spring of 1992. NPSAS:90 will also provide data for over 6,000 parents of the students. In addition to the student data which will be collected every 2 years, BPS will collect postsecondary transcripts and financial aid records covering the entire undergraduate period to provide complete information on progress and persistence. Data release from the first BPS is anticipated by the spring of 1993.

COMPONENTS:

Base Year (1990):

NPSAS Student Record Abstract (from institutional records):

Major field of study; type and control of institution; financial aid; cost of attendance; age; sex; race/ethnicity; family income.

NPSAS Student Interview:

Reasons for school selection; current marital status; employment and income; community service; background and preparation for college; college experience; future expectations.

NPSAS Parent Survey:

Parent's race/ethnicity; marital status; age; level of education achieved; income; occupation; financial support provided to children; methods of financing child's PSE expenses.

BPS Followup Surveys (every 2 years):

Year in school; persistence in enrollment; academic progress; change in field of study; institution transfer; education-related experiences; current family status; expenses and financial aid; employment and income; employment-related training; community service; political participation; graduate school plans; entry and progress in graduate school; future expectations.

POLICY AND RESEARCH ISSUES:

BPS will expand greatly the knowledge about persistence, progress, and attainment after entry into PSE. It will also directly address issues concerning access to graduate school, entry into the work force, and rates of return. Its unique contribution will be the inclusion of non-traditional (or older) students at the same rate as occurs in PSE today. This will provide the ability to better identify differences (if any) between traditional (recent high school graduates) and non-traditional (older) students in aspirations, progress, persistence, and attainment.

Among the questions BPS can address related to persistence are: Do students who are part-time or discontinuous attenders have the same educational goals as full-time consistent attenders? Are they as likely to attain similar educational goals? Are students who change majors more or less likely to persist? Are non-traditional students more or less likely to persist than their more traditional counterparts?

In the area of progress and curriculum, questions addressed by BPS could include: What is the "normal" rate of academic progress? How has that changed over time? What educational experiences are related to "normal" and consistent progress? Is likelihood of transfer related to academic major?

Attainment/outcome questions include: At what rate do those who intend to complete an educational program at or below the baccalaureate level do so? What educational experiences encourage completion? How long does it take to complete the program?

Questions which BPS can address about access to graduate and professional programs concern timing, the application process, and entry into the program. BPS will also be able to provide information on rate of return questions, particularly those associated with immediate entry into the work force after completion of a program of less than 4 years.

Further information on BPS may be obtained from:

Paula R. Knepper
Postsecondary Education
Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1914

Plans for Longitudinal Studies:

The second followup for NELS:88 is scheduled for 1992 when most of the cohort will be seniors in high school, and the third in 1994 when most of the cohort will be in the work force or participating in postsecondary education. The fourth followup of the High School and Beyond survey (HS&B) sophomore cohort is also planned for 1992, 10 years after high school graduation. The Beginning Postsecondary Student Longitudinal Survey (BPS), initiated in 1990, will continue to follow the student sample at 2-year intervals.

Postsecondary Needs

As part of its effort to improve and further broaden its longitudinal studies program, NCES is planning the Baccalaureate and Beyond (B&B) study. The B&B study will be based on those students about to complete a bachelor's degree, regardless of the length of time they have taken to complete the degree. This longitudinal study will follow graduating seniors into graduate/professional school, and into the work force. It will replace the current Recent College Graduate (RCG) study and also provide information concerning access, persistence, and progress in graduate and professional programs.

The B&B sample will be drawn from the 1993 NPSAS. Students identified as obtaining a baccalaureate degree within the 1992-93 academic year will be followed over at least a 12-year period. For the base year information, NPSAS will collect information from this group of students concerning future education and employment plans, including the process of application to and entry into graduate school. The students will also be asked about education and work experience, community and political activities, family formation, and future expectations. Postsecondary transcripts and student aid records for their full undergraduate education will also be requested from the institution they were attending in 1993.

One purpose of B&B is to determine the frequency of problems associated with access to and entry into graduate/first professional levels of education and the work force. Another purpose is to examine the rate of return for postsecondary education. Entry into and continued participation in public service professions will be studied, with emphasis on students certified for and/or entering the field of teaching.

Early Childhood Needs

In an attempt to be responsive to the information needs of the many education constituency groups below the postsecondary level, NCES is currently planning two new studies that will follow children at the preprimary/elementary and the middle/secondary levels. These studies will collect data across important transition points (e.g., preprimary to elementary school; middle/junior high school to high school).

The first of these studies, the Early Childhood Longitudinal Study (ECLS), will collect information on the education experiences of young children and will be used to answer questions concerning how children's health, family, and educational histories affect their chances of succeeding in school. NCES is considering several alternative designs (e.g., birth cohort, preprimary cohort, elementary school cohort, synthetic cohort) for this study of the early

experiences of young children. The age/grade level(s) that NCES selects for beginning this new longitudinal survey will be based on recommendations and findings from NCES sponsored design work and commissioned papers. Once it is successfully implemented, ECLS will provide researchers and policymakers with an array of data on the early experiences of *all* children that may be used to examine the relationships between these experiences and childrens' later learning, attitudes, and behaviors.

The second of these initiatives, the National Education Longitudinal Study of 1996 (NELS:96), will begin with a new cohort of middle/junior high school or secondary school students in 1996. The actual beginning point (grade) selected for NELS:96 will depend on recommendations and findings from NCES sponsored design work and commissioned papers. NELS:96 will be designed to provide data about critical transitions experienced by young people as they develop, attend school, and move both within and out of the school system. Survey instruments will be administered to students and the school principal, parents, and teachers of sampled students.

National Longitudinal Study Statistics

Selected Publications, Tabulations, and Data Files:

National Longitudinal Study of the High School Class of 1972:

A Descriptive Summary of 1972 High School Seniors: Fourteen Years Later (August 1988)
Student Progress in College: NLS-72 Postsecondary Education Transcript Study, 1984 (February 1989)
Changes in Educational Attainment: A Comparison Among 1972, 1980, and 1982 High School Seniors (April 1989)
Enrollment, Completion, Attrition, and Vocational Course-Taking Patterns in Postsecondary Education: A Comparison of 1972 and 1980 High School Graduates Entering Two-Year Institutions (May 1989)
E.D. TABS: Patterns and Consequences of Delay in Postsecondary Education: 1972, 1980, and 1982 High School Graduates (January 1990)
Trends in Postsecondary Credit Production, 1972 and 1980 High School Graduates (June 1990)
Women at ThirtySomething: Paradoxes of Attainment (June 1991)
Careers in Teaching: Following Members of the High School Class of 1972 In and Out of Teaching (July 1991)

NLS-72 Data Files:

Merged Base-Year, First, Second, Third, and Fourth Followup of High School Class of 1972
NLS-72 Fifth Followup

High School and Beyond:

High School and Beyond Financial Aid Supplement: Sophomore Cohort (April 1988)
College Students Who Work (June 1988)
A Descriptive Summary of 1980 High School Sophomores Six Years Later (June 1988)
High School and Beyond Sophomore Cohort Postsecondary Education Transcript Study (July 1988)
A Descriptive Summary of 1980 High School Seniors Six Years Later (July 1988)
Postsecondary Institutions Offering Vocational/Technical Program: Analysis Findings from High School and Beyond 1980-1986 (September 1988)
Enrollment in Postsecondary Education of 1980 and 1982 High School Graduates (October 1988)
High School and Beyond/NLS Postsecondary Enrollment Persistence, and Attainment for 1972, 1980, and 1982 High School Graduates (December 1988)

College Persistence and Degree Attainment for 1980 High School Graduates: Hazards for Transfers, Stopouts, and Part-Timers (January 1989)
Employment Experiences: How Do High School Dropouts Compare with Completers? (July 1990)

The Relationship Between Postsecondary and High School Course-Taking Patterns: The Preparation of 1980 High School Sophomores Who Entered Postsecondary Institutions by 1984 (December 1990)
Participation in Secondary Vocational Education, 1982-87 (Forthcoming)

HS&B Data Files:

1980 Sophomore Cohort Third Followup (1986) Data File (October 1987)
1980 Senior Cohort Third Followup (1986) Data File (October 1987)
Sophomore Cohort Postsecondary Education Transcript Study Data File (September 1988)

National Education Longitudinal Study of 1988:

A Profile of the American Eighth Grader: NELS:88 Student Descriptive Summary (June 1990)
E.D. TABS: Eighth Grader's Reports of Courses Taken during the 1988 Academic Year by Selected Student Characteristics (July 1990)
NELS:88 Base Year Sample Design Report (August 1990)
E.D. TABS: The Tested Achievement of the National Education Longitudinal Study of 1988 Eighth Grade Class (April 1991)
Psychometric Report for the NELS:88 Base Year Test Battery (April 1991)
Profile of the Schools Attended by NELS:88 Eighth Graders (September 1991)
Quality of Student Responses to NELS:88 Base Year Questionnaire (September 1991)

NELS:88 Data Files

Parent Component Data File
School Component Data File
Teacher Component Data File
Student Component Data File

Longitudinal Studies

Surveys

Base Year and Years of Followup Studies

	1972	1973	1974	1975	1976	1977	1978	1979	1986
National Longitudinal Study of 1972	B[1]	F[2]	F		F			F	F

Base Year and Years of Followup Studies

	1980	1981	1982	1983	1984	1985	1986	1990	1992
High School and Beyond	B		F		F		F		F

Base Year and Years of Followup Studies

	1988	1989	1990	1991	1992	1993	1994	1995	1996
National Educational Longitudinal Study of 1988	B		F		F		F		F

Base Year and Years of Followup Studies

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Beginning Post-secondary Students	NPSAS		F		F		F		F

Base Year and Years of Followup Studies

	1993	1994	1995	1996	1997	1998	1999	2000
Baccalaureate and Beyond	NPSAS	F		F			F	

[1] Base year

[2] Followup survey

6

Vocational Education

In 1984, NCES began to develop plans for a new system to collect information on vocational education. The new Data on Vocational Education (DOVE) system was presented to House and Senate Committee staff in January 1987. This new system derives data about vocational education from existing NCES secondary and postsecondary surveys (see the Surveys and Studies section of this chapter for a list of the surveys). A beneficial aspect of the new system is that it allows researchers to compare students who are concentrating in vocational education with those students who are not concentrating in vocational education.

One of the greatest changes that NCES made in its data collection system for vocational education at the secondary level was how it collects data about enrollment in vocational education. Instead of relying on reports from states that categorize students as being either vocational or non-vocational, NCES is collecting high school transcripts that indicate how much vocational education students take. This method of obtaining the data provides a more accurate picture of participation in vocational education, particularly since previous transcript studies showed that 98 percent of all graduating high school students had completed at least one course in vocational education in both 1982 and 1987.

Data Uses:

The primary use of the DOVE system is to report on the status of vocational education. NCES has published a considerable number of reports on a range of vocational topics, including students, teachers, and institutions. These publications are listed in the Selected Publications section of this chapter. The system also was the primary data source for the National Assessment of Vocational Education (NAVE), a congressionally mandated evaluation of federal vocational education programs. For example, NAVE used the High School and Beyond data for studies which attempted to measure high school curricular experiences as they relate to vocational education; course enrollment patterns; and student financial aid as it relates to postsecondary vocational education.

Surveys and Studies:

Listed below are the primary databases and components that are used by NCES for the analysis of vocational education issues. Only brief summaries of the surveys of interest are presented in this chapter. If a more complete description of a survey or component is needed, the reader should refer to the appropriate chapter. (NOTE—In this chapter, all major surveys are underlined, followed by the components of that particular survey. The surveys are grouped by category—secondary, postsecondary, and longitudinal studies.)

Secondary Data Collection:

High School Transcript Studies:

Complete high school transcripts including courses taken, grades, and credits earned. Personal data elements include: race/ethnicity; sex; age; and type and severity of handicapping condition.

The Schools and Staffing Survey:

Teacher Questionnaire:

Demographic characteristics; teaching preparation and qualifications; career history and plans; teaching assignments; working conditions; and perceptions of school environment and the teaching profession.

School Administrator Questionnaire:

Background characteristics/qualifications and perceptions of school climate and conditions.

Teacher Demand and Shortage Questionnaire:

For public school districts and private schools: aggregate demand for teachers by level; measures of teacher shortage; district and school policies on teacher salaries, compensation, retirement, hiring, and other factors affecting supply and demand.

Postsecondary Data Collection:

Integrated Postsecondary Education Data System:

Completions:

Postsecondary awards by level, by sex, race/ethnicity, and by field of study including vocational education.

Institutional Characteristics and Enrollment:

Types, sizes, and characteristics of institutions that offer vocational programs; full- and part-time enrollment by sex.

Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty:

Number of full-time instructional faculty by rank, sex, tenure status, and length of contract; salaries and fringe benefits of full-time instructional faculty.

Financial Statistics:

Current fund revenues by source (e.g., tuition and fees, government, private gifts); current fund expenditures by function (e.g, instruction, research, plant maintenance and operation); physical plant assets and indebtedness; and endowment investments.

Fall Enrollments in Occupationally Specific Programs:

Full- and part-time enrollments by sex; completers and early leavers by sex; length of program; change in enrollment; and full- and part-time staff by sex and assignment.

National Postsecondary Student Aid Study (NPSAS):

Student Survey:

Participation in vocational education; level; major field of study; type and control of institution; financial aid; cost of attendance; age; sex; race/ethnicity; marital status; and income.

Out-of-School Student Loan Recipient Survey (1987-88 only):

Major field of study; years attended and degrees received (if any); type and control of institution; financial aid; age; sex; race/ethnicity; marital status; income; and employment history (occupation, industry, and salary).

Student Record Abstract:

Year in school; major field of study; type and control of institution; financial aid; cost of attendance; grade point average; age; sex; race/ethnicity; marital status; income; employment; and salary.

Longitudinal Surveys:

National Longitudinal Survey of 1972 (NLS-72):

Ability; socioeconomic background; enrollment and attainment; geographic mobility; labor force outcomes; military outcomes; and marriage and family. Includes a study of high school transcripts.

High School and Beyond (HS&B):

Student characteristics; school experiences; future education plans; school enrollment; staff; special programs; teacher observations on students; characteristics and attitudes of parents.

National Education Longitudinal Study of 1988 (NELS:88):

Educational achievement and outcomes based on student, school administrator, teacher, parent and dropout questionnaires. Includes a study of high school transcripts. Substantial analysis of vocational and non-vocational students will not begin until the followup survey in 1992.

Further information on Vocational Education may be obtained from:

James Houser
Data Development Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5651
Telephone number (202) 219-1419

Plans for Vocational Education:

The transcript studies, the longitudinal studies, and SASS are the primary sources of vocational data in secondary education. High school transcript data was collected as a part of the NAEP during the 1990-91 school year and will continue to be obtained every 4 years in association with NAEP. NELS:88 will conduct followups every 2 years and plans are underway for the 1992 followup. A fourth followup of HS&B will be undertaken in 1992 also. SASS will be conducted every 2 years beginning in 1991.

At the postsecondary level, the Integrated Postsecondary Education Data System (IPEDS), the National Postsecondary Student Aid Study (NPSAS), and the longitudinal studies are the primary sources for vocational education data. Most of the IPEDS surveys will be conducted annually, while NPSAS will be conducted every 3 years, with the next survey occurring in 1993. As noted above, NELS:88 will continue with followup studies, as will HS&B and Beginning Postsecondary Students. A new postsecondary longitudinal study, Baccalaureate and Beyond (B&B), is also being initiated in 1993. It will follow postsecondary students beyond the postsecondary level. (For a description of B&B see the "Plans" section of Chapter 5.)

NCES has contracted for analyses of these data sets to provide new comparisons of vocational and nonvocational activities. Activities near completion are a comparison of the high school graduating classes of 1982 and 1987 and an analysis comparing vocational and nonvocational teachers.

Selected Publications:

Profile of 1972 High School Graduates Who Were Vocational Students at the Postsecondary Level (March 1988)

The Postsecondary Education of 1972 Seniors Completing AA Degrees and Certificates (March 1988)

Credits Earned by Field of Study and Level of Attainment for Postsecondary Vocational Students Who Were High School Graduates in 1972 (April 1988)

Credits Earned by Year and Level of Attainment for Postsecondary Vocational Students Who were High School Graduates in 1972 (April 1988)

Enrollment and Aid Status of Postsecondary Vocational Students Who Were High School Graduates in 1972 (April 1988)

Entry and Persistence of Postsecondary Vocational Students Who Were High School Graduates in 1972 (April 1988)

Field of Entry, Timing, and Completion for Postsecondary Vocational Students Who Were High School Graduates in 1972 (April 1988)

Nation at Risk Update Study, Preliminary (comparisons of courses taken by 1982 and 1987 high school graduates) (May 1988)

Undergraduate Financing of Postsecondary Education: A Report of the 1987 NPSAS (May 1988)

Enrollment, Completion, Attrition, and Vocational Course-taking Patterns in Postsecondary Education: A Summary Comparison of 1972 and 1980 High School Graduates Entering Two-year Institutions (August 1988)

Highest Educational Degree Attained by 1972 High School Seniors by Sex, Race, Type of High School, and Type of Community, as of Spring 1986 (September 1988)

Highest Educational Degree Attained by 1980 High School Seniors, by Sex, Race, Type of Community, and Type of High School, as of Spring 1984 (September 1988)

Postsecondary Institutions Offering Vocational/Technical Programs: Analysis Findings from High School and Beyond (1980-1986) (September 1988)

State Policies Concerning Vocational Education (November 1988)

Directory of Less-Than-2-Year Postsecondary Schools, Volume 2, 1987-1988 (November 1988)

Profiles of Handicapped Students in Postsecondary Education, 1987 (June 1989)

Secondary Vocational and Nonvocational Classes in Public Schools (June 1990)

Participation in Secondary Vocational Education, 1982-1987 (Forthcoming)

A Comparison of Vocational and Nonvocational Teachers in Grades 9 through 12 (Forthcoming)

7

Library Statistics Program

The NCES mandate to collect library statistics is included in the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (PL 100-297). NCES collects and disseminates statistical information on public, academic, and elementary and secondary school libraries.

The role played by libraries of all types in education has not been adequately measured, as evidenced by: 1) the ad hoc nature of past data collection efforts in terms of frequency of collection and library components surveyed, and 2) the lack of extant descriptive and outcome data. Measuring progress toward national education goals must include contributions of libraries to these efforts.

Data Uses:

These data provide the only current, national data on the status and rapid changes in libraries. They are used by federal, state, and local officials, professional associations, and local practitioners for planning, evaluation, and making policy. These data are also valuable to researchers and educators for developing valid and reliable conclusions concerning the state-of-the-art of librarianship and to improve its practice.

Surveys and Studies:

Public Library Statistics:

Nationwide public library statistics are collected and disseminated annually through the Federal-State Cooperative System for public library data (FSCS). FSCS completed its third data collection in July 1991. Descriptive statistics are produced for nearly 9,000 public libraries.

DESIGN:

FSCS is a model of the synergy that can result from combining federal/state cooperation with state-of-the-art technology. FSCS was the first national NCES data collection to be collected, edited, and tabulated completely in machine-readable form. NCES developed a personal computer software tool, known as DECTOP (Data Entry, Conversion, Table, Output Program), for states to use in collecting and reporting their public library data. DECTOP technology has been extremely cost effective and has improved statistical reliability checking for missing data and errors.

The respondents are the 50 states and the District of Columbia. At the state level, FSCS is administered by state data coordinators, appointed by each state's Chief Officer of the State Library Agency. An annual training conference is provided for the state data coordinators and a steering committee representing them is active in the development and testing of FSCS instruments and software. Technical assistance to states is provided by phone and in person by state data coordinators and by NCES staff and contractors. The FSCS response rate is 100 percent. The resulting data are available on an individual library basis and they are also aggregated to state and national levels.

To enhance FSCS, NCES has also developed the first public library universe file, PLUS (public library universe system). PLUS, which will be available in the Fall of 1991, is automated. Updated annually, it includes identifying information on every public library (including outlets), all state libraries, and some library systems and cooperatives. This resource will be used to improve FSCS data quality and for drawing samples for special surveys.

COMPONENTS:

FSCS Public Library Statistics:

Staffing, service outlets, operating income and expenditures, size of collection, and service measures such as reference transactions, interlibrary loans, circulation, and public service hours.

PLUS:

Outlet name, address, city, county, ZIP code, telephone number, library system relationship, legal basis code, population of legal service area, outlet type, metropolitan status code, population served by outlet, and number of bookmobiles.

POLICY AND RESEARCH ISSUES:

Libraries provide essential learning resources that strengthen and perpetuate formal and informal education. Valid, reliable, and timely statistics are essential for effective use by policymakers in determining the investment of public resources in library development and operations.

Library and information science covers a diverse and rapidly changing community. Data collection activity which seeks to inform decisionmaking must be sensitive to the changes taking place within the library community, and its policymakers and researchers. NCES has initiated an effort to promote the use of public library statistics among researchers and policymakers by holding a public library statistics seminar for these groups in November 1991.

Also, the new universe file, PLUS, will make it possible to do surveys on topics of policy and research importance such as literacy, handicapped access, and library construction. Prior to the development of PLUS, there was no national universe file of public and state libraries and their outlets.

Further information on public library statistics may be obtained from:

Carrol Kindel
Postsecondary Education Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5652
Telephone number (202) 219-1371

Academic Libraries Survey:

NCES surveyed academic libraries on a 3-year cycle between 1966 and 1988. Since 1988, the Academic Libraries Survey (ALS) has been a component of the Integrated Postsecondary Education Data System (IPEDS, see Chapter 3) and is on a 2-year cycle. ALS provides data on 4,377 academic libraries. In aggregate, these data provide an overview of the status of academic libraries nationally and statewide.

DESIGN:

The survey collects data on the libraries in the entire universe of accredited higher education institutions and on the libraries in nonaccredited institutions with a program of 4 years or more. ALS produces descriptive statistics on academic libraries in postsecondary institutions in the 50 states, the District of Columbia and the outlying areas.

NCES has developed IDEALS, a software package for states to use in submitting ALS data to NCES. IDEALS was used by 40 states in 1990. Like FSCS, ALS has an advisory committee. A librarian in each state serves as a library representative to help state IPEDS coordinators collect, edit, and submit ALS data to NCES.

COMPONENTS:

Academic Libraries Survey:

Total operating expenditures, full-time equivalent library staff, service outlets, total volumes held at the end of the fiscal year, circulation, interlibrary loans, public service hours, gate count, and reference transactions per typical week.

POLICY AND RESEARCH ISSUES:

ALS data provide information for policymakers and researchers on trends in total operating expenditures on academic libraries, services available to students, and adoption of new technologies such as giving students and researchers electronic access to bibliographic information. The survey also provides information on the staffing of academic libraries.

Further information on school library statistics may be obtained from:

Jeffrey Williams
Postsecondary Education Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5652
Telephone number (202) 219-1362

School Library Statistics:

The last national survey exclusively on school library media centers was conducted in school year 1985-1986. NCES started asking questions on libraries in public and private schools as part of the Schools and Staffing Survey (SASS, see Chapter 2). In the 1990-91 SASS, NCES field-tested two new questionnaires for school libraries.

DESIGN:

Recent information on school libraries has been collected from a sample of public and private elementary and secondary schools in SASS. A few questions on school libraries were included in the questionnaires. In addition, new questionnaires on the school library media center and on the school library media specialist were field-tested. See the plans section of this chapter for information on the implementation of these questionnaires.

COMPONENTS:

1990-91 SASS School Library Items:

School questionnaire:

Number of students served and number of professional staff and aides.

Teacher demand and shortage questionnaire at the district level:

Number of full-time equivalent librarians/media specialists, vacant positions, positions abolished, and approved positions.

School administrator questionnaire:

Amount of librarian input in establishing curriculum.

POLICY AND RESEARCH ISSUES:

Data will provide a national picture of school library collections, expenditures, technology, and services. This information will be used by federal, state, and local policymakers and practitioners in assessing the status of school library media centers in the United States. The information will contribute to the assessment of the federal role in supporting school libraries.

The library media specialist questionnaire will provide, for the first time, a national profile of the school library media specialist work force.

Further information on school library statistics may be obtained from:

Jeffrey Williams
Postsecondary Education Statistics Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5652
Telephone number (202) 219-1362

Plans for the Library Statistics Program:

NCES plans to continue collecting public library data through FSCS and to update PLUS annually. Efforts will be made in both FSCS and PLUS to improve data quality, for example, by improving state and local training. NCES also hopes to do more sophisticated analyses of FSCS data including time-series analysis and regional, size and input/output comparisons. There are also plans to improve data collection efficiency by collecting PLUS data as part of the annual data collection for public libraries.

The collection of academic library data through IPEDS will be continued also. NCES plans to improve the quality of the data by promoting the use of IDEALS software for data collection. New data elements focusing on electronic access and other new technologies may be added to the survey. The ALS reports will contain more detailed analyses of the data.

NCES will continue school library data collection through SASS. In addition, a followup survey of turnover and retention issues among school librarians may be conducted. Full-scale implementation of the public and private school library media questionnaires is planned for the 1992-93 SASS and will be repeated every 4 years. Decisions about sample size and design will be based on the results of the 1990-91 field test. Data from one of the questionnaires will provide a national picture of school library media center facilities, collections, equipment, technology, staffing, income and expenditures, and services. The data from the other questionnaire will profile the school library media specialist work force, including demographic characteristics, academic background, work load, career histories and plans, compensation, and perceptions of the school library media specialist profession and workplace. There will also be data on cooperative activities between librarians and teaching staff in developing course materials.

The first topical survey using the Postsecondary Education Quick Information System is planned for fiscal year 1993. NCES is also planning a survey of State Library Agencies for 1993.

Library Statistics Program

Selected Publications and Tabulations:

Public Libraries in Forty-Four States and the District of Columbia: 1988; an NCES Working Paper (November 1989)
E.D. TABS: Academic Libraries: 1988 (September 1990)
E.D. TABS: Public Libraries in Fifty States and the District of Columbia: 1989 (April 1991)

Data Files:

Public Libraries in Forty-four States and the District of Columbia: 1988 (March 1990)
Public Libraries in Fifty States and the District of Columbia: 1989 (May 1990)
Academic Libraries: 1988 (October 1990)

Library Statistics Program

Surveys	*Year of Data Collection*								
	1988	1989	1990	1991	1992	1993	1994	1995	1996
Public Libraries	X	X	X	X	X	X	X	X	X
Academic Libraries	X		X		X		X		X
School Libraries (SASS)	X			X		X		X	
School Library Media Centers				X		X			

8

Major Publications of NCES

NCES annually produces three major publications which enjoy wide circulation: *The Condition of Education, Digest of Education Statistics,* and *Projections of Education Statistics.* These publications present statistics on a wide array of education topics. They are used in a number of diverse ways by policymakers, researchers, and the general public.

The Condition of Education:

NCES gathers and publishes information on the status and progress of education in the United States. The federal authorization (enacted in 1974, but with antecedents to 1867) for these activities states that the Center will "collect, collate, and from time to time, report full and complete statistics on the conditions of education in the United States." This legislation mandated an annual statistical report from the Secretary of Education. In 1988, the Hawkins-Stafford Elementary/Secondary School Improvement Amendments delegated that reporting responsibility to the Commissioner of Education Statistics.

In 1975, *The Condition of Education* was created in response to this mandate. The publication attempted to present, in a single volume, an overview of education in the United States. The format of *The Condition of Education* was designed to present statistical information in an accessible manner for a general audience. The *Condition*, by analyzing statistical studies and data, investigated the context of education in this country, educational attainment, financing of education, enrollments, attitudes about school, the supply of teachers, and other related undertakings. The *Condition* also presented statistics on postsecondary education in the United States. Analysis here focused on educational attainment, the financing of postsecondary education, enrollments, age, and data on persistence in postsecondary education. Tables and required technical notes were also included. In short, the *Condition* was an attempt to form a focused view of the state of education in this country.

In the late 1980s, the *Condition* became an "indicators" publication which publishes data on a limited number of indicators describing major topics of interest and concern in education today. All possible indicators are not published in a given edition of the *Condition.* No more than 60 indicators are presented in each year's report. By contrast, the Center's other major compendium, the *Digest of Education Statistics* (see separate description in this chapter), includes more than 380 statistical tables, plus figures and appendices. The indicators, therefore, represent a consensus of professional judgement on the most significant national measures of the condition and progress of education at the time, but tempered, necessarily, by the availability of current and valid information. The indicators include a basic core that can be repeated with information

every year, supplemented by a more limited set of indicators based on infrequent or one-time studies.

The concept of education indicators has gained the attention of the U.S. Congress, national organizations, states and localities. To assist the Center in conceptualizing and developing a set of education indicators useful to policymakers and researchers, the Congress mandated that NCES convene a special study panel of experts to "make recommendations concerning the determination of education indicators for study." The report of the panel was transmitted to Congress in August 1991. Its recommendations could result in structural or content changes for future editions of the *Condition*.

The utility of this report should also increase in the future as more diverse, high quality data become available, especially as new time series can be constructed. Elementary and secondary education data will be enhanced by revisions in the basic data collected about public schools in the Common Core of Data and by continuation and expansion of the Schools and Staffing Survey (SASS, see Chapter 2) which covers both public and private schools. Also, more postsecondary data will become available from new surveys such as the Adult Education component of the National Household Education Survey and the proposed postsecondary longitudinal surveys (see Chapters 3 and 5).

For more information on *The Condition of Education* contact:

Nabeel A. Alsalam
Data Development Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5650
Telephone number (202) 219-2252

Digest of Education Statistics:

The *Digest of Education Statistics* is the Center's primary resource publication on education statistics. It contains a wealth of information on all levels of education from preprimary through graduate education. This reference volume is intended for use by researchers, policy analysts, business, media, students, educators and the general public. The *Digest* has expanded through its long history, as the staff has adopted a policy of continuous development without sacrificing important trend information.

The development of the *Digest* occurred over an extended period of time. For 40 years, from 1916-18 to 1956-58, the statistical component of the Office of Education prepared and published the *Biennial Survey of Education in the United States*. Most of the important data collected by the Office was placed in the *Biennial Survey*, which was a resource used by researchers, planners, and others interested in the field of education statistics. After 1958, publication of the *Biennial Survey* ceased, but the need for a document summarizing the various types of data collected by the Office of Education continued. Thus, in 1962, the first edition of the *Digest of Education Statistics* (*Digest*) was issued.

The 1991 Digest is the twenty-seventh in this series of publications. (The *Digest* has been issued annually except for combined editions for the years 1977-78, 1983-84, and 1985-86.) Its primary purpose is to provide a compilation of statistical information covering the broad field of American education from kindergarten through graduate school. The *Digest* includes a selection of data from many sources, both government and private, and draws especially on the results of surveys and activities carried out by the National Center for Education Statistics. The *Digest* contains a considerable amount of material tabulated exclusively for the *Digest* such as summaries of federal funds for education and detailed tabulations on degrees conferred by colleges and universities. The publication contains information on schools, teachers, enrollments, graduates, educational attainment, finances, federal funds for education, employment and income of graduates, libraries, and international education. Supplemental information on population trends, attitudes on education, education characteristics of the labor force, government finances, and economic trends provides background for evaluating education data.

The *Digest* is now divided into seven chapters: All Levels of Education, Elementary and Secondary Education, Postsecondary Education, Federal Programs for Education and Related Activities, Outcomes of Education, International Education, and Learning and Technology. To qualify for inclusion in this publication, material must be nationwide in scope and of current interest and value. The introduction supplements the tabular materials in chapters 1 through 7 by providing a brief overview of current trends in American education. Each chapter contains an introduction to statistical materials describing that sector of education, as well as a series of short paragraphs that describe the most significant data in the chapter. Charts are provided to further illuminate important data.

Recently, NCES has begun a program to expand the scope of the material included in the *Digest* to make it even more comprehensive. To make data analysis more convenient, a machine-readable version has been developed. NCES has also created *Education Statistics: A Pocket Digest* to make basic education statistics available in a two-page flyer. The *Pocket Digest* includes statistics on enrollments, expenditures, faculty, degrees, and population characteristics in an abbreviated form.

The *Digest* strives for clarity, consistency, and comparability. It places high value on the major recurring surveys, with the objective of providing trend data that researchers and policymakers can use to measure changes over time. It seeks to preserve the major series of education statistics originating with NCES and elsewhere and to make them readily available to a wide audience of users.

For more information on the *Digest of Education Statistics* contact:

Thomas D. Snyder
Data Development Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington, DC 20208-5650
Telephone number (202) 219-1689

Projections of Education Statistics

The National Center for Education Statistics is the official federal source of education projections at the national and state levels. Projections are made in the areas of: enrollments; graduates and earned degrees conferred; instructional staff; and expenditures in elementary and secondary schools and institutions of higher education. The principal publication dealing with projections is the *Projections of Education Statistics (Projections)*. The report provides national projections of statistics about elementary and secondary schools and institutions of higher education. Included are data on enrollments, graduates, degrees, instructional staff, and expenditures for the past 15 years, and projections for the next 12 years. The report also contains a methodology section that describes models and assumptions used to develop these projections. Most of the projections are based on three alternative sets of assumptions. Although the middle alternative is the preferred set of projections, the other (high and low) alternatives provide a range of outcomes.

A summary of these projections is available in a pocket-sized folder called *Pocket Projections*. This brochure is a quick reference for projections of key education statistics. The information provided in the report is used by researchers and policy planners in education and related areas. The projections are particularly targeted for individuals in business, industry, government, the media, and educators whose work requires information on projected developments and trends affecting American education.

Projections also provides projections of key education statistics for public elementary and secondary schools at the state level. The report presents 12 years of projections for enrollment and graduates in public elementary and secondary schools. It is designed to provide researchers, policy analysts, and other users with state-level projections developed with a consistent methodology.

For more information on the *Projections of Education Statistics* and projection methodology contact:

Debra E. Gerald
Statistical Standards and Methodology Division
National Center for Education Statistics
555 New Jersey Avenue NW
Washington DC 20208-5654
Telephone number (202) 219-1581

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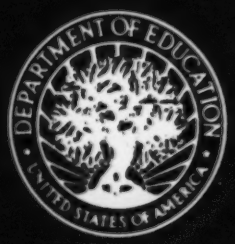

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